

The Distribution of Vascular Plants in Ulleungdo and Nearby Island Regions (Gwaneumdo, Jukdo), Korea

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Abstract: The distribution of vascular plants in Ulleungdo Island and nearby islands (Gwaneumdo and Jukdo) located in Ulleung-gun area, Gyeongsangbuk-do. On-site investigation was conducted twice on June and September, 2012, investigating total 99 families, 304 genera and 508 taxa. This study also arranged already-secured specimens of the Korea National Arboretum (KH) (1917-2011), organizing 106 families, 362 genera and 646 taxa. As a result, total 108 families, 375 genera and 685 taxa of vascular plants were organized in the investigation area. In detail, this study confirmed 30 taxa of endemic plants including *Sambucus sieboldiana* var. *pendula*, *Silene takeshimensis*, and *Corydalis filistipes*, 41 taxa of rare plants including *Arisaema takesimense*, *Dendranthema zawadskii* var. *lucidum*, and *Tripterospermum japonicum*, 4 taxa of special plants of forest protection designated by the Korea Forest Service including *Abelia coreana* var. *insularis*, *Fagus engleriana*. Besides, specific plants designated by the Ministry of Environment were 121 taxa, and naturalized plants were 89 taxa.

Keywords: Ulleung-gun, endemic plant, rare plant, naturalized plant

Introduction

Ulleung-gun is the area composed of only islands in the East Coast of Korea. Total 44 islands are in this area, and among them, Ulleungdo, Dokdo, Jukdo and Gwaneumdo are inhabited islands with the other large and small rocky islands. Geographically, it is located between 130°47' and 131°52' east longitude and between 37°33' and 37°14' north latitude, and the shortest distance to Jukbyeon-myeon, Uljin-gun inland is 130.3 km. It has a maritime climate, mild and highly humid climate. Annual average temperature is 12.5°C for 8 years (1999-2006), daily temperature difference is 2.0°C, quite low compared with that inland areas, annual average wind speed is 3.2 m/s, having quite strong wind, precipitation is 1,161 mm/year, rather low compared with the annual precipitation of Korea, and relative humidity is rather high, 72.5% (Lee and Kim, 2007). As for floristic region, it belongs to Ulleungdo subregion (Lee and Yim, 2002), and it is a biologically important area having unique vegetation and diversity with temperate plants and warm-temperate plants.

In Ulleungdo Island, the investigation area, Seonginbong (alt. 984 m) is located at the center of the island, surrounded by Mireuksan (alt. 901 m), Maljandeung (alt. 968 m), Gandusan (alt. 967 m) and Cheondusan (alt. 961 m) along the ridge.

Nari Basin, the only flatland is located at the foot of Seonginbong, and the other areas are mostly high rocky areas, hard to access to those areas except residential area. Gwaneumdo area is connected to Ulleungdo through a suspension bridge newly completed recently, and has a trail. And it has a trace of human's intervention before, but it is currently uninhabited, under restoration project of major species of Ulleungdo. Jukdo is an inhabited island, which has trails attracting lots of visitors as well as farmland and private houses at the center of the island.

As for the studies on the distribution of plants in Ulleung-gun area, according to Lee and Yang (1981), Okamoto first collected plants of Ulleungdo in 1902, and Ishidoya reported 40 families and 79 species of trees and plants in 1917. Also, in the initial stages, Japanese people such as Nakai (1919) arranged many investigations, but after that, Korean researchers continuously conduct studies on the distribution of plants, and they come to use more detailed methods based on accurate basis (Yang, 1956; Lee and Joo, 1957; Choi, 1973; Lee and Yang, 1981; Shin *et al.*, 1996; Kim *et al.*, 2000; Shin and Kim, 2002; Kil *et al.*, 2006; Kim, 2007; Park *et al.*, 2007; Yang, 2010; Korea National Arboretum, 2011; Shin *et al.*, 2011a; Shin *et al.*, 2011b). As interest in bio-diversity has been raised internationally, the study aims to discuss bio-diversity and specificity in Ulleung-gun area which is important as for plant distribution. In addition, the study was conducted in order to supplement existing studies on plant distribution, to accumulate data and to promote existing reference.

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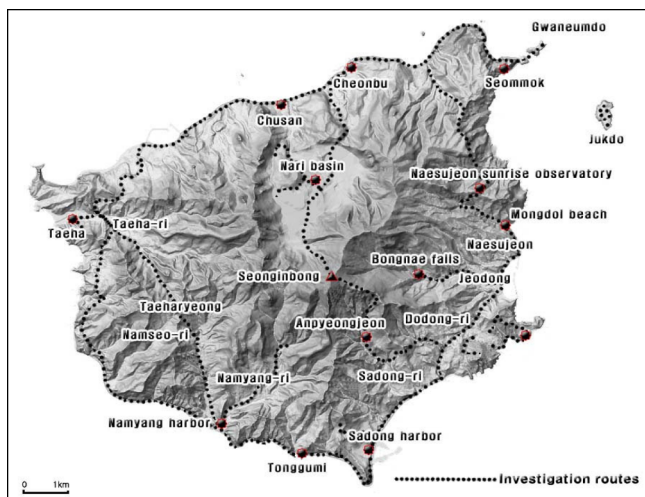


Fig. 1. Investigation routes in Ulleung-gun.

Table 1. Investigation dates and areas

	date	investigated area
Jun.	25	Jeodong→Bongnae falls
	26	A: Nari Basin surround B: Taehwa-ri→Namyang-ri
	27	Mongdol beach, Naesujeon A: Gwaneumdo
	28	B: Seommok→Naesujeon sunrise observatory C: Seommok→Cheonbu→Chusan→Taeha→Tonggumi→Sadong
	29	Seashore walking paths, Dodong
Sep.	3	A: Anpyeongjeon B: Sadong
	4	Namyang-ri
	5	A: Gwaneumdo B: Jukdo
	6	Naridong→Seonginbong→Anpyeongjeon
	7	Nari Basin camp→Chusan

Materials and Methods

In order to figure out flora in Ulleung-gun area, the study conducted on-site investigation on June and September, 2012 targeting Ulleungdo, Gwaneumdo and Jukdo which seem to be easy to access and to have diverse vegetation (Fig. 1, Table 1). Also, the study organized specimens which the Division of Forest Biodiversity and Herbarium of the Korea National Arboretum (KH) possesses (1917-2011) and included to this study result. In order to ensure the accuracy of the result when conducting on-site investigation, only specimens having generative organs such as a flower, fruit and a spore were collected in principle, and in case that a specimen was immature or had no generative organs, only ones having accurate a name and taxon were recorded. Collected plants were made into a dry specimen or liquid-immersed specimen, and were stored in KH. Decision of taxa was arranged by using pictorial books of Lee (1980,

2003), Park (1995, 2001, 2009) and Lee (1996a, 1996b), and the study referred to the Ministry of Environment and National Institute of Environmental Research (2006) for specific plants, Oh *et al.* (2005) for endemic plants, the Korea Forest Service (2012) for special plants of forest protection and Korea National Arboretum (2008) for rare plants.

Results

Flora Investigation

Total 108 families, 375 genera and 685 taxa of vascular plants in Ulleungdo, Gwaneumdo and Jukdo were organized including 99 families, 304 genera and 508 taxa in the on-site investigation and 106 families, 362 genera and 646 taxa from the already-secured specimens (Appendix). The study figured out 13 families, 26 genera and 64 taxa of pteridophyta, 4 families, 7 genera and 9 taxa of gymnosperm, 82 families, 280 genera and 486 taxa of dicotyledon and 9 families, 62 genera and 126 taxa of monocotyledon as for angiosperm (Table 2). Total 108 families, 375 genera and 682 taxa of vascular plants were found in Ulleungdo area. It was shown that *Artemisia japonica* subsp. *littoricola* mostly dominated coast vegetation with some of *Aster sphathulifolius*, *Lysimachia mauritiana*, *Peucedanum japonicum* and *Cyrtomium falcatum*. In some coastal areas, several problems were figured out such as destruction of natural vegetation due to road construction and etc. As for forest vegetation, mixed stand forest was dominant in the upper areas around Seonginbong, but dominance value of *Fagus engleriana*, tree stratum was generally high, and there were also *Acer pictum* subsp. *mono*, *A. takesimensis* and *Tilia insularis*. As for herbaceous layer, cover rate of *Arachniodes standishii* was the highest, and *Hepatica maxima* and *Adenocaulon himalaicum* were distributed. The middle and lower areas of mountains were mainly composed of mixed stand forest having various kinds of evergreen broad-leaved trees, deciduous broad-leaved trees and coniferous trees, and the herbaceous layer also had high level of diversity. Gwaneumdo area is surrounded by high shore cliff, and as a result of the investigation, it has 38 families, 66 genera and 80 taxa. *Machilus thunbergii* and *Camellia japonica*, evergreen broad-leaved trees dominated most areas, and it showed no specificity in plant distribution compared with Ulleungdo area. 42 families, 79 genera and 95 taxa of vascular plants were found in Jukdo area, showing similar plant distribution aspects with Gwaneumdo area. The center of Jukdo is mainly used as a farmland or ranch, and there was lots of artificial intervention due to development of trails at the edge of the area. It was shown that most natural vegetation was arranged along the shore cliff (Table 3).

Table 2. Summary on the floristics in the island regions of Ulleung-gun

taxa	fam.	gen.	sp.	subsp.	var.	f.	Total
Pteridophyta	13	26	57	1	4	2	64
Gymnospermae	4	7	8	-	1	-	9
Angiospermae							
Dicotyledons	82	280	414	4	62	6	486
Monocotyledons	9	62	103	-	20	3	126
total	108	375	582	5	87	11	685

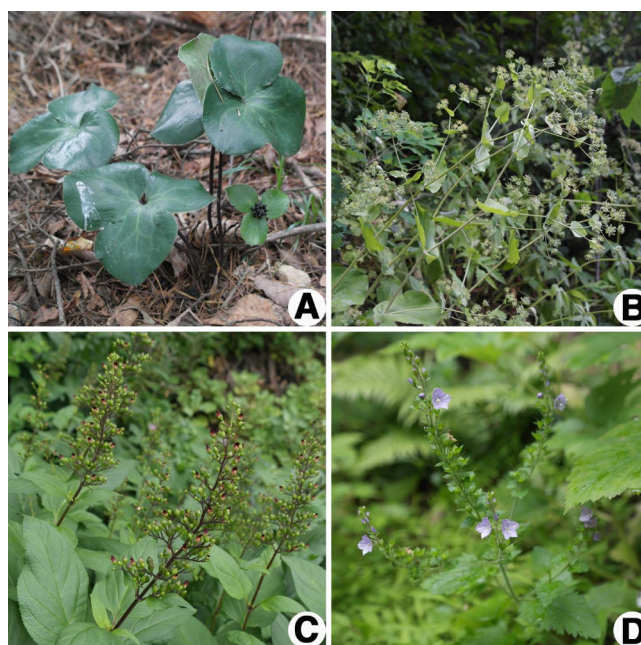
Table 3. The number of vascular plants in the island regions of Ulleung-gun

site	fam.	gen.	sp.	subsp.	var.	f.	total
Ulleungdo	108	375	581	5	86	10	682
Gwaneumdo	38	66	68	1	11	-	80
Jukdo	42	79	84	2	7	2	95
total	108	375	582	5	87	11	685

Endemic Plant

Yang (1956), Lee and Joo (1957) and Hong *et al.* (2002) recorded about 40 taxa as an endemic plant distributed in Ulleungdo. This study figured out 30 taxa of endemic plants including *Athyrium acutipinnulum*, *Silene takeshimensis*, *Hepatica maxima* and *Corydalis filistipes* except planted species, accounting for 4.4% of total investigated taxa (Fig. 2, Table 4).

As for *Bupleurum latissimum*, as many researchers including Ahn and Lee (2007) and Kang and Kim (2010) conducted a study on the distribution and the plan for preservation, and the Ministry of Environment and the Korea National Arboretum arranges projects for preserving and restoring natural growth areas targeting currently-known areas, the species will be maintained safely in the future. This study figured out its distribution in Taeha-ri and Namyang-ri which seems to be an additional growth area except those mentioned in the precedent studies. In those two areas, individual number is around 20 growing in the forest areas or around farmland, and especially, it is judged that as the degree of closure of forest trees is high in forest areas, decline of the amount of light may cause a problem. The study figured out that *Scrophularia takesimensis* distributed sporadically along the coastal area, and the number of individual was not much. Its growth areas are mainly around roads or the coastal areas, so it is judged that human's activity would influence on the growth of this species. According to Kim and Kang (2010), *S. takesimensis* distributes over several areas, but it shows inferiority in the competition with other plants in the natural vegetation, and they also predict that artificial factors due to local development would cause problems. Besides, most species are shown to live only in Ulleung-gun areas, showing unique biodiversity due to geographical isolation.

**Fig. 2.** A. *Hepatica maxima* Nakai; B. *Bupleurum latissimum* Nakai; C. *Scrophularia takesimensis* Nakai; D. *Veronica insularis* Nakai.

Rare Plant

Total 41 taxa of rare plants designated by the Korea Forest Service were found (Fig. 3, Table 5). Among them, critically endangered species (CR) were 8 taxa including *Selaginella sibirica*, *Cotoneaster wilsonii* and *Abelia coreana* var. *insularis*. Besides, 8 taxa of endangered species (EN) including *Lathraea japonica*, *Dendranthema zawadskii* var. *lucidum* and *Gymnadenia camtschatica*, 13 taxa of vulnerable species (VU) including *Polypodium vulgare*, *Tripterispermum japonicum*, *Trillium tschonoskii*, and 12 taxa of least concerned species (LC) including *Crypsinus hastatus*, *Tsuga sieboldii*, *Tiarella polyphylla* were figured out. As for a major plant, *Cotoneaster wilsonii* and *Abelia coreana* var. *insularis* were found in Dodong area, but the number of plant was not many. In Tonggumi and Namyang area which is the natural growth area of *Cotoneaster wilsonii* additionally reported by Shin *et al.* (2003), small-sized population grows in desolate areas, showing that the general number of individual is not many. Accordingly, Kim *et al.* (2002) once mentioned that ex situ conservation would be necessary. As most rare plants have limited distribution in Ulleungdo area like endemic plants, they would be managed with special interest.

Specific Plant

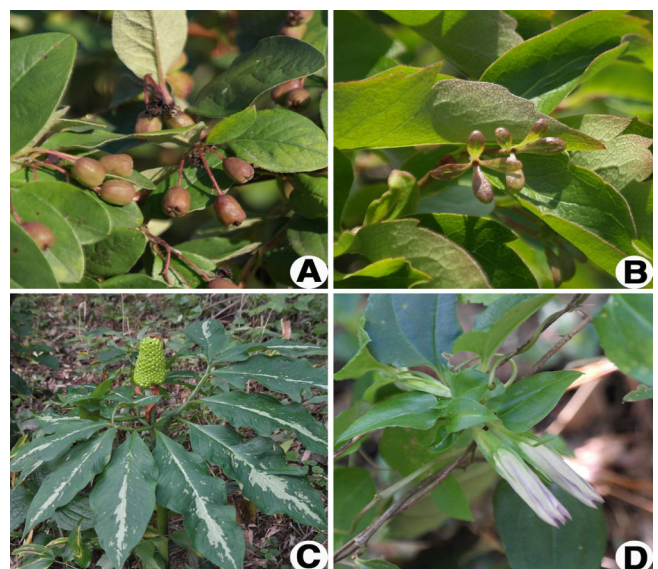
Among specific plants designated by the Ministry of Environment about important species on the floristics, 21 taxa belonging to V degree were figured out including *Lilium hansonii*, *Dendranthema makinoi* and *Wasabia japonica*. 25 taxa including *Carex blepharicarpa* var.

Table 4. The list of the Korean endemic plants in the island regions of Ulleung-gun

fam.	scientific name & Korean name	U	G	J
Woodsiaceae	<i>Athyrium acutipinnulum</i> Kodama ex Nakai 섬고사리	○		
Salicaceae	<i>Salix ishidoyana</i> Nakai 섬버들	○		
Fagaceae	<i>Fagus engleriana</i> Seemen ex Diels 너도밤나무	○		
Phytolaccaceae	<i>Phytolacca insularis</i> Nakai 섬자리공	○		
Caryophyllaceae	<i>Silene takeshimensis</i> Uyeki & Sakata 울릉장구채	○		
Ranunculaceae	<i>Hepatica maxima</i> Nakai 섬노루귀	○		
Fumariaceae	<i>Corydalis filistipes</i> Nakai 섬현호색	○		
Cruciferae	<i>Arabis takesimana</i> Nakai 섬장대	○		
Saxifragaceae	<i>Saxifraga fortunei</i> var. <i>pilosissima</i> Nakai 털바위떡풀	○		
Rosaceae	<i>Physocarpus insularis</i> (Nakai) Nakai 섬국수나무	○		
Rosaceae	<i>Potentilla dickinsii</i> var. <i>glabrata</i> Nakai 섬양지꽃	○		
Rosaceae	<i>Prunus takesimensis</i> Nakai 섬벚나무	○	○	
Rosaceae	<i>Rubus takesimensis</i> Nakai 섬나무딸기	○	○	○
Tiliaceae	<i>Tilia insularis</i> Nakai 섬피나무	○		
Violaceae	<i>Viola seoulensis</i> Nakai 서울제비꽃	○		
Violaceae	<i>Viola takesimana</i> Nakai 섬제비꽃	○		
Umbelliferae	<i>Bupleurum latissimum</i> Nakai 섬시호	○		
Umbelliferae	<i>Dystaenia takesimana</i> (Nakai) Kitag. 섬바디	○	○	○
Oleaceae	<i>Ligustrum foliosum</i> Nakai 섬취통나무	○		
Oleaceae	<i>Syringa patula</i> var. <i>venosa</i> (Nakai) K.Kim 섬개회나무	○		
Labiatae	<i>Lamium takesimense</i> Nakai 섬광대수염	○	○	
Scrophulariaceae	<i>Scrophularia takesimensis</i> Nakai 섬현삼	○		
Scrophulariaceae	<i>Veronica insularis</i> Nakai 섬꼬리풀	○		
Caprifoliaceae	<i>Sambucus sieboldiana</i> var. <i>pendula</i> (Nakai) T.B.Lee 말오줌나무	○	○	○
Campanulaceae	<i>Adenophora erecta</i> S.T.Lee, J.G.Lee & S.T.Kim 선모시대	○		
Campanulaceae	<i>Campanula takesimana</i> Nakai 섬초롱꽃	○	○	○
Compositae	<i>Saussurea macrolepis</i> (Nakai) Kitam. 각시서덜취	○		
Gramineae	<i>Poa takeshimana</i> Honda 섬포아풀	○	○	○
Gramineae	<i>Poa ullungdoensis</i> I.C.Chung 울릉포아풀	○		
Araceae	<i>Arisaema takesimense</i> Nakai 섬납성	○		

※ U: Ulleungdo, G: Gwaneumdo, J: Jukdo.

stenocarpa, *Poa takeshimana* and *Dystaenia takesimana* belong to IV degree, and 26 taxa including *Farfugium japonicum*, *Rhododendron brachycarpum* and *Viburnum furcatum* belong to III degree (Fig. 4, Table 6). Besides, 9 taxa and 40 taxa belong to II and I degree respectively. As for a major plant, *Wasabia japonica* was found in Nari Basin. In this area, it seems that the natural growth area decreases due to *Adenocaulon himalaicum* or other species, but it is reported that some individuals continue to grow in areas mentioned by Shin and Kim (2002), and there are some cases of restoration in some areas. However, there is still a dispute on whether they grow naturally or not (Shin and Kim, 2008). *Festuca rubra* is a species distributing in the northern area of inland, and distributes widely along the shore cliff and rock face of the lower part of mountains in Ulleungdo. Confirmed specific plants are 121 taxa, accounting for 17.7% of total plants investigated in this study. Considering that 72 taxa belong to III degree or higher with high importance, it was shown that considerable amount of major species on the chorology distribute in these areas. Like this, higher frequency of appearance of species distributing in limited areas has a very important

**Fig. 3.** A. *Cotoneaster wilsonii* Nakai; B. *Abelia coreana* var. *insularis* (Nakai) W.T.Lee & W.K.Paik; C. *Arisaema takesimense* Nakai; D. *Tripterospermum japonicum* (Siebold & Zucc.) Maxim.

meaning on the chorology, and it reflects the characteristics of unique plant distribution in Ulleung-gun area.

Table 5. List of the rare and endangered plants which was designated by Korea Forest Service

fam.	scientific name & Korean name	degree	U	G	J
Selaginellaceae	<i>Selaginella sibirica</i> (Milde) Hieron. 실사리		○		
Fumariaceae	<i>Corydalis filistipes</i> Nakai 섬현호색		○		
Rosaceae	<i>Cotoneaster wilsonii</i> Nakai 섬개야광나무		○		
Rosaceae	<i>Physocarpus insularis</i> (Nakai) Nakai 섬국수나무	CR	○		
Onagraceae	<i>Epilobium hirsutum</i> L. 큰바늘꽃		○		
Umbelliferae	<i>Bupleurum latissimum</i> Nakai 섬시호		○		
Scrophulariaceae	<i>Scrophularia takesimensis</i> Nakai 섬현삼		○		
Caprifoliaceae	<i>Abelia coreana</i> var. <i>insularis</i> (Nakai) W.T.Lee & W.K.Paik 섬냉장나무		○		
Hymenophyllaceae	<i>Crepidomanes amabile</i> (Nakai) K.Iwats. 난장이이끼		○		
Orobanchaceae	<i>Lathraea japonica</i> Miq. 개종용		○		
Compositae	<i>Cirsium nipponicum</i> (Maxim.) Makino 물영경귀		○		○
Compositae	<i>Dendranthema zawadskii</i> var. <i>lucidum</i> (Nakai) J.H.Park 울릉국화	EN	○		
Compositae	<i>Dendranthema makinoi</i> (Matsum.) Y.N.Lee 마키노국화		○		
Liliaceae	<i>Polygonatum robustum</i> (Korsch.) Nakai 왕등굴레		○	○	
Araceae	<i>Arisaema takesimense</i> Nakai 섬남성		○		
Orchidaceae	<i>Gymnadenia camtschatica</i> (Cham.) Miyabe & Kudô 주름제비란		○		
Parkeriaceae	<i>Adiantum pedatum</i> L. 공작고사리		○		
Woodsiaceae	<i>Deparia okuboana</i> (Makino) M.Kato 진피리개고사리		○		
Polypodiaceae	<i>Polypodium vulgare</i> L. 미역고사리		○		
Taxaceae	<i>Taxus baccata</i> var. <i>latifolia</i> Nakai 회솔나무		○		
Phytolaccaceae	<i>Phytolacca insularis</i> Nakai 섬자리공		○		
Ranunculaceae	<i>Hepatica maxima</i> Nakai 섬노루귀		○		
Gentianaceae	<i>Tripterospermum japonicum</i> (Siebold & Zucc.) Maxim. 덩굴용담	VU	○		
Labiatae	<i>Nepeta cataria</i> L. 개박하		○		
Labiatae	<i>Thymus quinquecostatus</i> var. <i>japonica</i> H.Hara 섬백리향		○		○
Orobanchaceae	<i>Orobanche coerulescens</i> Stephan 초종용		○		
Liliaceae	<i>Lilium hansonii</i> Leichtlin ex Baker 섬말나리		○		
Liliaceae	<i>Trillium tschonoskii</i> Maxim. 큰연영초		○		
Orchidaceae	<i>Cephalanthera erecta</i> var. <i>subaphylla</i> (Miyabe & Kudô) Ohwi 꼬마은난초		○		
Aspleniaceae	<i>Asplenium scolopendrium</i> L. 골고사리		○		
Polypodiaceae	<i>Crypsinus hastatus</i> (Thunb.) Copel. 고란초		○		
Pinaceae	<i>Tsuga sieboldii</i> Carrière 솔송나무		○		
Fagaceae	<i>Fagus engleriana</i> Seemen ex Diels 너도밤나무		○		
Ulmaceae	<i>Celtis chosoniana</i> Nakai 감팽나무		○		
Saxifragaceae	<i>Tiarella polyphylla</i> D.Don 혈떡이풀	LC	○		
Pyrolaceae	<i>Monotropa uniflora</i> L. 수정난풀		○		
Ericaceae	<i>Rhododendron brachycarpum</i> D.Don ex G.Don 만병초		○		
Campanulaceae	<i>Campanula takesimana</i> Nakai 섬초롱꽃		○	○	○
Liliaceae	<i>Allium senescens</i> L. 두메부추		○		
Liliaceae	<i>Maianthemum dilatatum</i> (Wood) A.Nelson & J.F.Macbr. 큰두루미꽃		○		
Orchidaceae	<i>Goodyera schlechtendaliana</i> Rchb.f. 사철란		○		

* U: Ulleungdo, G: Gwaneumdo, J: Jukdo.

Special Species of Forest Protection

4 taxa of special species of forest protection designated by the Korea Forest Service (Korea Forest Service, 2012) were figured out. Except *Rhododendron brachycarpum* which also grows inland, *Fagus engleriana* and *Physocarpus insularis* are endemic plants only growing in Ulleungdo, and *Abelia coreana* var. *insularis* has limited distribution in Ulleungdo area. Around Seonginbong, *Fagus engleriana* becomes a dominant species, and *Rhododendron brachycarpum* distributes sporadically along the foot of a mountain. *Physocarpus insularis* seems to distribute around the foot of a mountain or valleys, and *Abelia coreana* var. *insularis*

has limited distribution in Dodong area.

Naturalized Plant

Total 89 taxa of naturalized plants were figured out, accounting for 12.9% of total taxa, and the figure is 27.7% of 321 species of domestically naturalized plants announced by Lee *et al.* (2011), quite a high level. Among investigated naturalized plants, Compositae and Gramineae showed high appearance ratio up to 44.9% with 20 taxa respectively, followed by Leguminosae (10 taxa) and Polygonaceae (6 taxa) (Fig. 5, Table 7). Naturalized plants which appeared in all of 3 areas are 4 taxa including *Chenopodium album*,

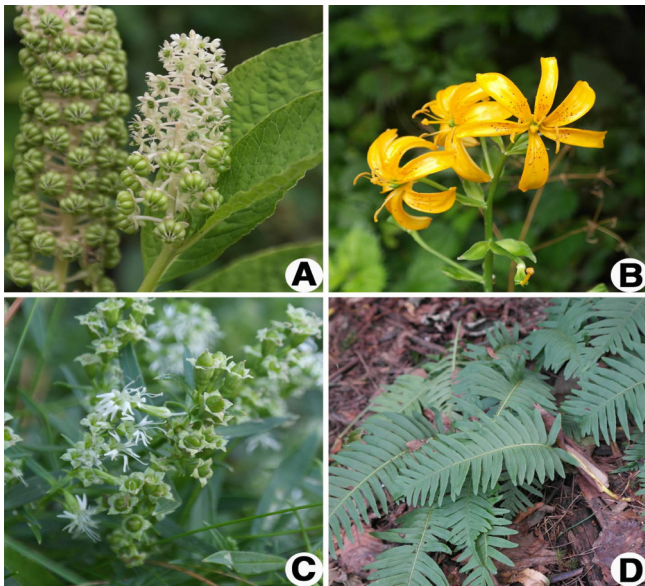


Fig. 4. A. *Phytolacca insularis* Nakai; B. *Lilium hansonii* Leichtlin ex Baker; C. *Silene takeshimensis* Uyeki & Sakata; D. *Polypodium vulgare* L.

Robinia pseudoacacia, *Sonchus asper* and *Erigeron annuus* which generally grow nationally. Endangered species in Ulleungdo is *Lapsana communis*. Small amount of it was observed around a ticket office of Bongrae waterfall, and large amount was confirmed to grow naturally in Sadong area. It seems to grow naturally both in sunny places and shady places. It is an annual flower, but each individual has many inflorescence and fruit. Its distribution area is not wide yet, but it is necessary to consider potential riskiness. Generally, distribution of naturalized plants was not quite much in Gwaneumdo, showing more vigorous growth of

indigenous species, so it does not seem to have any considerable risks in the future. However, due to the recent increase in tourists, it may cause spread of naturalized plants in Ulleungdo. Artificial interruption due to farmland was severe in Jukdo, and like Gwaneumdo, high level of inflow of tourists may cause problems. Generally, island areas have higher risk of being interrupted by naturalized plants than inland due to the size and extent, so it is necessary to figure out the current conditions and to prepare a management plan for the areas with high biodiversity as Ulleung-gun area.

Particulars

1) *Allium ochotense* Prokh.

Allium ochotense which widely distributes in Ulleungdo has been recognized as *A. microdictyon* in most precedent studies (Kim *et al.*, 2000; Shin and Kim, 2002; Korea national Arboretum, 2011; Shin *et al.*, 2011a). However, Yoo *et al.* (1998a, b) reported that groups distributing in Ulleungdo has difference from groups distributing inland, and Choi *et al.* (2004) considered it as an independent species based on morphological characteristics such as the shape and size of a leaf blade, and color and size of a sheath and the floral envelope. After that, a molecular phylogenetic study based on ITS base sequence supported that groups between two areas are different species (Choi, 2009). *A. ochotense* widely distributed around Seonginbong, Ulleungdo, and is sometimes cultivated as a local specialty.

2) *Artemisia capillaris* Thunb.

As for *A. capillaris* and *A. japonica* subsp. *littoricola* of genus *Artemisia* which distribute in the coastal area of

Table 6. The list of 5th to 3rd degree taxa of specially designated plants by the Ministry of Environment

degree	scientific name / Korean name	U	G	J
V	<i>Selaginella sibirica</i> (Milde) Hieron. 설사리	○		
	<i>Crepidomanes amabile</i> (Nakai) K.Iwats. 난장이이끼	○		
	<i>Crepidomanes birmanicum</i> (Bedd.) K.Iwats. 누운괴불이끼	○		
	<i>Crypsinus hastatus</i> (Thunb.) Copel. 고란초	○		
	<i>Phytolacca insularis</i> Nakai 섬자리공	○		
	<i>Hepatica maxima</i> Nakai 섬노루귀	○		
	<i>Houttuynia cordata</i> Thunb. 약모밀	○		
	<i>Corydalis filistipes</i> Nakai 섬현호색	○		
	<i>Wasabia japonica</i> (Miq.) Matsum. 고추냉이	○		
	<i>Tiarella polyphylla</i> D.Don 혈떡이풀	○		
	<i>Cotoneaster wilsonii</i> Nakai 섬개야광나무	○		
	<i>Physocarpus insularis</i> (Nakai) Nakai 섬국수나무	○		
	<i>Bupleurum latissimum</i> Nakai 섬시호	○		
	<i>Tripterospermum japonicum</i> (Siebold & Zucc.) Maxim. 덩굴용담	○		
	<i>Scrophularia takesimensis</i> Nakai 섬현삼	○		
	<i>Lathraea japonica</i> Miq. 개종용	○		
	<i>Orobanche coerulescens</i> Stephan 초중용	○		
	<i>Dendranthema zawadskii</i> var. <i>lucidum</i> (Nakai) J.H.Park 울릉국화	○		
	<i>Dendranthema makinoi</i> (Matsum.) Y.N.Lee 마키노국화	○		
	<i>Lilium hansonii</i> Leichtlin ex Baker 섬말나리	○		
	<i>Trillium tschonoskii</i> Maxim. 큰연영초	○		

Table 6. The list of 5th to 3rd degree taxa of specially designated plants by the Ministry of Environment

degree	scientific name / Korean name	U	G	J
IV	<i>Sceptridium multifidum</i> var. <i>robustum</i> (Rupr.) M.Nishida 산고사리삼	○		
	<i>Pinus parviflora</i> Siebold & Zucc. 섬잣나무	○		
	<i>Tsuga sieboldii</i> Carrière 솔송나무	○		
	<i>Alnus maximowiczii</i> Callier 두메오리나무	○		○
	<i>Fagus engleriana</i> Seemen ex Diels 너도밤나무	○		
	<i>Fallopia sachalinensis</i> (F.Schmidt) Ronse Decr. 왕호장근	○		
	<i>Silene takeshimensis</i> Uyeki & Sakata 울릉장구채	○		
	<i>Prunus takesimensis</i> Nakai 섬벚나무	○	○	
	<i>Sorbus amurensis</i> Koehne 당마가목	○		
	<i>Viola kusanoana</i> Makino 큰줄방제비꽃	○		
	<i>Dystaenia takesimana</i> (Nakai) Kitag. 섬바디	○	○	○
	<i>Ligustrum foliosum</i> Nakai 섬취뽕나무	○		
	<i>Veronica insularis</i> Nakai 섬꼬리풀	○		
	<i>Lonicera insularis</i> Nakai 섬괴불나무	○	○	○
	<i>Sambucus sieboldiana</i> var. <i>pendula</i> (Nakai) T.B.Lee 말오춤나무	○	○	○
	<i>Valeriana dageletiana</i> Nakai ex F.Mack. 넓은잎쥐오줌풀	○		
	<i>Campanula takesimana</i> Nakai 섬초롱꽃	○	○	○
	<i>Aster glehni</i> F.Schmidt 섬쑥부쟁이	○	○	○
	<i>Cirsium nipponicum</i> (Maxim.) Makino 물영경귀	○		○
	<i>Festuca rubra</i> L. 왕김의털	○	○	
	<i>Poa takesimana</i> Honda 섬포아풀	○		
	<i>Sasa kurilensis</i> (Rupr.) Makino & Shibata 섬조릿대	○		
	<i>Arisaema takesimense</i> Nakai 섬남성	○		
	<i>Carex blepharicarpa</i> var. <i>stenocarpa</i> Ohwi 여우꼬리사초	○		
	<i>Gymadenia camtschatica</i> (Cham.) Miyabe & Kudô 주름제비란	○		
III	<i>Equisetum palustre</i> L. 개쇠뜨기	○		
	<i>Asplenium scolopendrium</i> L. 골고사리	○		
	<i>Arachniodes mutica</i> (Franch. & Sav.) Ohwi 털비늘고사리	○		
	<i>Arachniodes standishii</i> (Moore) Ohwi 일색고사리	○		
	<i>Polypodium vulgare</i> L. 미역고사리	○		
	<i>Juniperus chinensis</i> L. 향나무	○		
	<i>Quercus salicina</i> Blume 참가시나무	○		
	<i>Boehmeria nivea</i> var. <i>nippononivea</i> (Koidz.) W.T.Wang 섬모시풀	○		
	<i>Hydrangea petiolaris</i> Siebold & Zucc. 등수국	○		
	<i>Schizophragma hydrangeoides</i> Siebold & Zucc. 바위수국	○		
	<i>Sorbaria sorbifolia</i> var. <i>stellipila</i> Maxim. 쉬땅나무	○		
	<i>Indigofera pseudotinctoria</i> Matsum. 낭아초	○		
	<i>Daphniphyllum macropodum</i> Miq. 굴거리나무	○		
	<i>Zanthoxylum ailanthoides</i> Siebold & Zucc. 머귀나무	○	○	
	<i>Ilex integra</i> Thunb. 감탕나무	○		
	<i>Fatsia japonica</i> (Thunb.) Decne. & Planch. 팔손이나무	○		
	<i>Centella asiatica</i> (L.) Urb. 병풀	○		
	<i>Rhododendron brachycarpum</i> D.Don ex G.Don 만병초	○		
	<i>Asperula odorata</i> L. 선갈퀴	○		
	<i>Mitchella undulata</i> Siebold & Zucc. 호자덩굴	○		
	<i>Glechoma grandis</i> (A.Gray) Kuprian. 긴병꽃풀	○		
	<i>Phacellanthus tubiflorus</i> Siebold & Zucc. 가지더부살이	○		
	<i>Viburnum furcatum</i> Blume 분단나무	○	○	
	<i>Farfugium japonicum</i> (L.) Kitam. 털머위	○		○
	<i>Allium senescens</i> L. 두메부추	○		
	<i>Maianthemum dilatatum</i> (Wood) A.Nelson & J.F.Macbr. 큰두루미꽃	○		

※ U: Ulleungdo, G: Gwaneumdo, J: Jukdo.

Ulleungdo, *A. capillaris* caused confusion with *A. scoparia*. Precedent researchers (Lee and Joo, 1957; Lee and Yang, 1981) have recorded the distribution of *A. scoparia* in Ulleungdo, but recently, Park *et al.* (2011) considered *A.*

scoparia which has been known to distribute in the country as a mutant of *A. capillaris*. However, plants generally show various mutants according to the environment, it would be necessary to investigate various natural growth

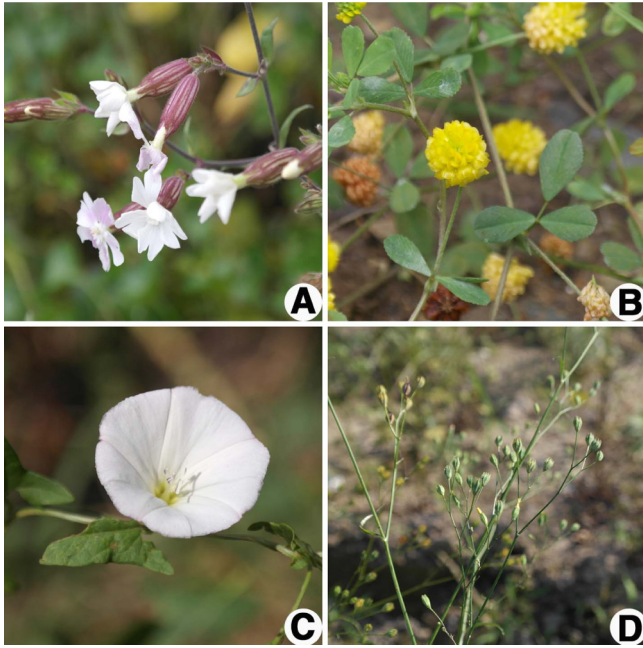


Fig. 5. A. *Silene alba* (Mill.) E.H.L.Krause; B. *Trifolium campestre* Schreb.; C. *Convolvulus arvensis* L.; D. *Lapsana communis* L.

areas of foreign distribution spots in the future.

3) *Poa ullungdoensis* I.C. Chung

Among plants belonging to genus *Poa* distributing in Ulleungdo, *P. takeshimana* and *P. ullungdoensis* are known as a Korea endemic plant (Oh *et al.*, 2005). Those two taxa have similar external morphology, but Chung (1955) presented *P. ullungdoensis* as a new species as it had hair on the base of lepicena. Recently, Jung (2008), and Jung and Chung (2008) did not acknowledge existing characteristic as a trait, and divided them based on the shape of inner glume surface, but as those two studies did not mention the type specimen and only arranged on-site investigation, hard to figure out the exact nature. Therefore, it is judged that it would be necessary to conduct more detailed comparative study between the two species.

4) *Aster oharai* Nakai

The nature of this species causes lots of different views like *A. sphathulifolius* and researchers show different opinions. Recently, Kim (2007) suggested that this species has fewer

Table 7. The list of naturalized plants in the island regions of Ulleung-gun

Polygonaceae	<i>Fallopia dentatoalata</i> (F.Schmidt) Holub 큰닭의덩굴	○		
	<i>Fallopia dumetorum</i> (L.) Holub 닭의덩굴	○		
	<i>Rumex acetosella</i> L. 애기수영	○		
	<i>Rumex crispus</i> L. 소리쟁이	○	○	
	<i>Rumex nipponicus</i> Franch. & Sav. 쯤소리쟁이	○		
	<i>Rumex obtusifolius</i> L. 돌소리쟁이	○		
Caryophyllaceae	<i>Cerastium glomeratum</i> Thuill. 유럽점나도나물	○		
	<i>Silene armeria</i> L. 끈끈이대나물	○		
	<i>Silene gallica</i> L. 양장구채	○		
	<i>Silene alba</i> (Mill.) E.H.L.Krause 달맞이장구채	○		
Chenopodiaceae	<i>Chenopodium album</i> L. 흰명아주	○	○	○
	<i>Chenopodium ambrosioides</i> L. 양명아주	○		
	<i>Chenopodium ficifolium</i> Smith 쯤명아주	○		
	<i>Chenopodium glaucum</i> L. 취명아주	○		
Amaranthaceae	<i>Amaranthus patulus</i> Bertol. 가는털비름	○		
	<i>Amaranthus hybridus</i> L. 긴털비름	○		
Saururaceae	<i>Houttuynia cordata</i> Thunb. 약모밀	○		
Cruciferae	<i>Barbarea vulgaris</i> R.Br. 유럽나도냉이	○		
	<i>Brassica juncea</i> (L.) Czern. 갓	○		○
	<i>Lepidium apetalum</i> Willd. 다닥냉이	○		
	<i>Lepidium virginicum</i> L. 콩다닥냉이	○		
	<i>Sisymbrium officinale</i> (L.) Scop. 유럽장대	○		
Leguminosae	<i>Amorpha fruticosa</i> L. 족제비싸리	○	○	
	<i>Medicago lupulina</i> L. 잔개자리	○		
	<i>Medicago polymorpha</i> L. 개자리	○		
	<i>Medicago sativa</i> L. 자주개자리	○		
	<i>Melilotus alba</i> Medicus 흰전동싸리	○		
	<i>Melilotus suaveolens</i> Ledeb. 전동싸리	○		
	<i>Robinia pseudoacacia</i> L. 아까시나무	○	○	○
	<i>Trifolium campestre</i> Schreb. 노랑토끼풀	○		
	<i>Trifolium pratense</i> L. 붉은토끼풀	○		○
	<i>Trifolium repens</i> L. 토끼풀	○		

Table 7. Continued

fam.	scientific name & Korean name	U	G	J
Geraniaceae	<i>Geranium carolinianum</i> L. 미국취손이	○		
Euphorbiaceae	<i>Euphorbia supina</i> Raf. 애기땅빈대	○		
Malvaceae	<i>Abutilon theophrasti</i> Medicus 어저귀	○		
	<i>Hibiscus trionum</i> L. 수박풀	○		
	<i>Malva neglecta</i> Wallr. 난쟁이아욱	○		
	<i>Malva sylvestris</i> var. <i>mauritanica</i> Boiss. 당아욱	○		
Onagraceae	<i>Oenothera biennis</i> L. 달맞이꽃	○		
Umbelliferae	<i>Anthriscus caucalis</i> M.Bieb. 유럽전호	○		
	<i>Foeniculum vulgare</i> Gaertn. 회향	○		
Convolvulaceae	<i>Convolvulus arvensis</i> L. 서양메꽃	○		
	<i>Ipomoea hederacea</i> var. <i>integriscula</i> A.Gray 둥근잎미국나팔꽃	○		
	<i>Ipomoea purpurea</i> Roth 둥근잎나팔꽃	○		
Boraginaceae	<i>Symphytum officinale</i> L. 컴프리	○		
Labiatae	<i>Scutellaria baicalensis</i> Georgi 황금	○		
Scrophulariaceae	<i>Veronica arvensis</i> L. 선개불알풀	○		
	<i>Veronica persica</i> Poir. 큰개불알풀	○		
Compositae	<i>Ambrosia artemisiifolia</i> L. 돼지풀	○		
	<i>Bidens frondosa</i> L. 미국가막사리	○		
	<i>Bidens pilosa</i> L. 울산도깨비바늘	○		
	<i>Carduus crispus</i> L. 지느러미영경귀	○		
	<i>Conyza canadensis</i> (L.) Cronquist 망초	○		○
	<i>Conyza sumatrensis</i> E.Walker 큰망초	○		○
	<i>Crassocephalum crepidioides</i> (Benth.) S.Moore 주홍서나물	○		
	<i>Erechtites hieracifolia</i> Raf. 붉은서나물	○		
	<i>Erigeron annuus</i> (L.) Pers. 개망초	○	○	○
	<i>Galinsoga ciliata</i> (Raf.) S.F.Blake 털별꽃아재비	○		
	<i>Helianthus tuberosus</i> L. 뽕단지	○		
	<i>Hypochaeris radicata</i> L. 서양금혼초	○		
	<i>Lactuca scariola</i> L. 가시상추	○		
	<i>Lapsana communis</i> L. 서양개보리뽕이	○		
	<i>Senecio vulgaris</i> L. 개쑥갓	○		
	<i>Sonchus asper</i> (L.) Hill 큰방가지뚥	○	○	○
	<i>Sonchus oleraceus</i> L. 방가지뚥	○		○
	<i>Tagetes minuta</i> L. 만수국아재비	○		
	<i>Taraxacum officinale</i> Weber 서양민들레	○		
	<i>Xanthium strumarium</i> L. 도꼬마리	○		
Iridaceae	<i>Tritonia crocosmaeflora</i> Lemoine 몬트부레치아	○		
Gramineae	<i>Aegilops cylindrica</i> Host. 염소풀	○		
	<i>Agropyron repens</i> (L.) P.Beauv. 구주개밀	○		
	<i>Agropyron repens</i> f. <i>aristatum</i> Holmb. 까락구주개밀	○		
	<i>Avena fatua</i> L. 메귀리	○		
	<i>Avena sativa</i> L. 귀리	○		
	<i>Bromus mollis</i> L. 털참새귀리	○		
	<i>Bromus rigidus</i> Roth 긴까락뱃새귀리	○		
	<i>Bromus secalinus</i> L. 큰참새귀리	○		
	<i>Bromus sterilis</i> L. 까락뱃새귀리	○		
	<i>Bromus tectorum</i> L. 털뱃새귀리	○	○	
	<i>Bromus tectorum</i> var. <i>glabratus</i> Spenner 민둥뱃새귀리	○		
	<i>Bromus unioloides</i> H.B.K. 큰이삭풀	○		○
	<i>Dactylis glomerata</i> L. 오리새	○		○
	<i>Eragrostis curvula</i> Nees 능수참새그렁	○		
	<i>Festuca arundinacea</i> Schreb. 큰김의털	○	○	
	<i>Festuca myuros</i> L. 들목새	○		
	<i>Lolium multiflorum</i> Lamarck 쥐보리	○		
	<i>Lolium perenne</i> L. 호밀풀	○	○	
	<i>Phleum pratense</i> L. 큰조아재비	○		
	<i>Poa pratensis</i> L. 왕포아풀	○		

※ U: Ulleungdo, G: Gwaneumdo, J: Jukdo.

pilus on the leaf, less sticky than *A. sphathulifolius*, has more serration on the leaf, has longer involucre and has more hair on the tube of a lingulate flower and a tubular flower, easy to distinguish it from *A. sphathulifolius* on the external morphology and molecular phylogeny. However, as there are some parts which cannot suggest quantitative traits clearly on the external morphology, it is judged that it would be necessary to conduct more detailed comparative study in the future.

5) *Physocarpus insularis* (Nakai) Nakai

P. insularis is a species reported as a new species by Nakai (1918, 1952), and is currently designated as an endemic plant and a rare plant. However, Kim *et al.* (2000) recognized it as the same one with *Spiraea chamaedryfolia* growing inland based on the characteristics of the bark, shape of a wax gourd, shape of leaf, a stamen of a flower, an ovary, follicle and distribution of hair of *Physocarpus insularis* (Nakai) Nakai. This divides the two plants only based on the external morphology, and it is judged that it would be necessary to figure out accurate nature through general tests.

Discussion

By conducting on-site investigation in 2012 and by organizing specimens secured in the Division of Forest Biodiversity and Herbarium of the Korea National Arboretum (KH), this study figured out total 108 families, 375 genera and 685 taxa of vascular plants in Ulleungdo and nearby Island regions (Gwaneumdo and Jukdo). This study was a complementary investigation on the plant distribution in Ulleungdo area, so it has some difficulties to show changes of plants by comparing with existing precedent studies. However, it has a great meaning in that it promotes existing reference and secures practical information on distribution areas of taxa through specimens. Until now, precedent studies have mostly focused on the investigation in the flora in Ulleungdo area, and various studies have been conducted. Among them, the study organized reference which is judged to include evident specimens or to conduct precise investigation (Table 8) and arranged total 131 families, 519 genera and 1140 taxa. Some reference causes some problems such as wrong recognition or wrong record of plants, but the study also listed and recorded those problems (Appendix). For example, it recorded taxa which required additional discussion on the taxonomy or has distribution in doubt separately in the whole list, and makes it utilized as the basis for correcting errors which may be caused in the plant distribution study in the future.

Ulleungdo area has different climatic environment from inland area at the same latitude, and is isolated geographically, having unique plant distribution and independent evolution tendency. Due to this, it forms unique plant assemblage and

Table 8. Summary of advanced research

	author	published year	taxa
1	Yang	1956	562
2	Lee and Joo	1957	543
3	Choi	1973	212
4	Lee and Yang	1981	442
5	Shin <i>et al.</i>	1996	312
6	Kim <i>et al.</i>	2000	317
7	Shin and Kim	2002	627
8	Kil <i>et al.</i>	2006	54
9	Kim	2007	358
10	Park <i>et al.</i>	2007	28
11	Yang	2010	520
12	Korea National Arboretum	2011	486
13	Shin <i>et al.</i>	2011a	291
14	Shin <i>et al.</i>	2011b	199
			1140 taxa

shows diversity. It would be necessary to continuously conduct various studies and to prepare safety plans about how to preserve and manage this area in the future. As for this, Kim *et al.* (2000) suggested that specimen collection and studies on the flora should be conducted constantly. As a part of that plan, a project to preserve, manage and restore major species is in progress currently, but the fundamental plan is to maintain and manage the natural growth area as it is. In addition, it would be necessary to prepare a thorough safety plan against inflow of naturalized plants which may cause disturbance to native plants.

Acknowledgments

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Appendix 1. The list of vascular plants distributed of Ulleung-gun (O: review)

Scientific name & Korean name	1	2	3	4
Lycopodiaceae 석송과				
<i>Lycopodium clavatum</i> L. 석송	O			
<i>Lycopodium selago</i> L. 좁다람쥐꼬리	O			
<i>Lycopodium serratum</i> Thunb. 뱀톱 P0252	O	O		
Selaginellaceae 부처손과				
<i>Selaginella involvens</i> (Sw.) Spring 바위손	O			
<i>Selaginella nipponica</i> Franch. & Sav. 선비늘이끼	O			
<i>Selaginella sibirica</i> (Milde) Hieron. 실사리 KHB1040015	O	O		
<i>Selaginella tamariscina</i> (P.Beauv.) Spring 부처손	O			
Equisetaceae 속새과				
<i>Equisetum arvense</i> L. 쇠뜨기 P120021	O	O		O
<i>Equisetum hyemale</i> L. 속새	O			
<i>Equisetum palustre</i> L. 개쇠뜨기 KHB1268619	O	O		
<i>Equisetum pratense</i> Ehrh. 물쇠뜨기	O			
<i>Equisetum ramosissimum</i> Desf. 개속새	O			
Ophioglossaceae 고사리삼과				
<i>Sceptridium multifidum</i> var. <i>robustum</i> (Rupr.) M.Nishida 산고사리삼 KHB1040026	O	O		
<i>Sceptridium ternatum</i> (Thunb.) Lyon 고사리삼 P120028	O	O		
Osmundaceae 고비과				
<i>Osmunda cinnamomea</i> var. <i>fokiensis</i> Copel. 평고비	O			
<i>Osmunda claytoniana</i> L. 음양고비	O			
<i>Osmunda japonica</i> Thunb. 고비 P120355	O	O		
Schizaeaceae 실고사리과				
<i>Lygodium japonicum</i> (Thunb.) Sw. 실고사리	O			
Hymenophyllaceae 처녀이끼과				
<i>Crepidomanes amabile</i> (Nakai) K.Iwats. 난장이이끼 KHB1040043	O	O		
<i>Crepidomanes birmanicum</i> (Bedd.) K.Iwats. 누운괴불이끼 KHB1040044		O		
<i>Crepidomanes insignis</i> (Bosch) Fu. 괴불이끼	O			
Dennstaedtiaceae 잔고사리과				
<i>Dennstaedtia hirsuta</i> (Sw.) Mett. ex Miq. 잔고사리 P121839	O	O		
<i>Hypolepis punctata</i> (Thunb.) Mett. ex Kuhn 점고사리	O			
<i>Pteridium aquilinum</i> var. <i>latiusculum</i> (Desv.) Und. ex Heller. 고사리 P122253	O	O	O	
Lindsaeaceae 비고사리과				
<i>Sphenomeris chinensis</i> (L.) Maxon 바위고사리	O			
Davalliaceae 넉줄고사리과				
<i>Davallia mariesii</i> Moore ex Bak. 넉줄고사리	O			
Parkeriaceae 공작고사리과				
<i>Adiantum monochlamys</i> D.C.Eaton 섬공작고사리	O			
<i>Adiantum pedatum</i> L. 공작고사리 P121597	O	O		
<i>Coniogramme intermedia</i> Hieron 고비고사리 P0253	O	O		
<i>Pleurosoriopsis makinoi</i> (Maxim. ex Makino) Fomin 줄고사리 KHB1040062		O		
Aspleniaceae 꼬리고사리과				
<i>Asplenium incisum</i> Thunb. 꼬리고사리 P0167	O	O		
<i>Asplenium scolopendrium</i> L. 골고사리 P121702	O	O		
Dryopteridaceae 먼마과				
<i>Arachniodes borealis</i> Serizawa 왓살고사리 P121686	O	O		
<i>Arachniodes mutica</i> (Franch. & Sav.) Ohwi 털비늘고사리 KHB1040172	O	O		
<i>Arachniodes standishii</i> (Moore) Ohwi 일색고사리 P121705	O	O		
<i>Cyrtomium caryotideum</i> var. <i>coreanum</i> Nakai 참쇠고비	O			
<i>Cyrtomium falcatum</i> (L.f.) C.Presl 도깨비쇠고비 P122306	O	O	O	O
<i>Cyrtomium fortunei</i> J.Sm. 쇠고비 P121957	O	O		
<i>Cyrtomium fortunei</i> var. <i>clivicola</i> (Makino) Tagawa 산쇠고비 KHB1263680		O		
<i>Dryopteris bissetiana</i> (Bak.) C.Chr. 산족제비고사리 P121646	O	O		
<i>Dryopteris chinensis</i> (Bak.) Koidz. 가는잎족제비고사리 P122064	O	O		
<i>Dryopteris crassirhizoma</i> Nakai 관중 P0087	O	O		
<i>Dryopteris erythrosora</i> (D.C.Eaton) Kuntze 홍지네고사리 P121889	O	O		
<i>Dryopteris erythrosora</i> f. <i>viridisora</i> (Nakai ex H.Ito) H.Itô 청지네고사리 P121987		O		
<i>Dryopteris expansa</i> (C.Presl) Fraser-Jenk. & A.C.Jermy 퍼진고사리	O			
<i>Dryopteris hikonensis</i> (H.Ito) Nakaike 큰족제비고사리	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Dryopteris lacera</i> (Thunb.) Kuntze 비늘고사리 P121625	O	O		
<i>Dryopteris maximowiczii</i> (Bak.) Kuntze 진저리고사리	O			
<i>Dryopteris monticola</i> (Makino) C.Chr. 왕지네고사리 P125501		O		
<i>Dryopteris nipponensis</i> Koidz. 참지네고사리 KHB1040144	O	O		
<i>Dryopteris polylepis</i> (Franch. & Sav.) C.Chr. 산비늘고사리	O			
<i>Dryopteris sacrosancta</i> Koidz. 애기죽제비고사리 KHB1040116	O	O		
<i>Dryopteris saxifraga</i> H.Itô 바위죽제비고사리 P0223	O	O		
<i>Dryopteris tokyoensis</i> (Matsum. ex Makino) C.Chr. 느리미고사리	O			
<i>Dryopteris uniformis</i> (Makino) Makino 곰비늘고사리 P121899	O	O		
<i>Dryopteris varia</i> (L.) Kuntze 죽제비고사리	O			
<i>Polystichum braunii</i> (Spenn.) F� 좀나도히초미 KHB1040159	O	O		
<i>Polystichum ovatopaleaceum</i> (Kodama) Kurata 지리개관중	O			
<i>Polystichum ovatopaleaceum</i> var. <i>coraiense</i> (Christ) Kurata 참나도히초미 P121829	O	O		
<i>Polystichum polyblepharum</i> (Roem. ex Kunze) C.Presl 나도히초미 KHB1040162	O	O		
<i>Polystichum pseudomakinoi</i> Tagawa 나도개관중 P122920		O		
<i>Polystichum retroso-paleaceum</i> (Kodama) Tagawa 비늘개관중 P121685	O	O		
<i>Polystichum tripterum</i> (Kunze) C.Presl 십자고사리 P0270	O	O		
<i>Polystichum tripterum</i> f. <i>subbipinnatum</i> H.Ito. 큰십자고사리 KHB1040166	O	O		
Thelypteridaceae 처녀고사리과				
<i>Segnogramma pozoi</i> subsp. <i>mollissima</i> (Fisch. ex Kunze) K.Iwats. 진퍼리고사리 P121595	O	O		
<i>Thelypteris decursive-pinnata</i> (v.Hall) Ching 설설고사리 KHB1040157	O	O		
<i>Thelypteris phegopteris</i> (L.) Slosson ex Rydb 가래고사리	O			
Woodsiaceae 우드풀과				
<i>Athyrium acutipinnulum</i> Kodama ex Nakai 섬고사리 P121650	O	O		
<i>Athyrium brevifrons</i> Kodama ex Nakai 참새발고사리 P0075	O	O		
<i>Athyrium clivicola</i> Tagawa 암뱀고사리 P121192	O	O		
<i>Athyrium distentifolium</i> Tausch ex Opiz 산고사리	O			
<i>Athyrium iseanum</i> Rosenst. 가늘잎개고사리	O			
<i>Athyrium niponicum</i> (Mett.) Hance 개고사리 P122759	O	O		
<i>Athyrium vidalii</i> (Franch. & Sav.) Nakai 산개고사리 KHB1040095	O	O		
<i>Athyrium yokoscense</i> (Franch. & Sav.) Christ 뱀고사리 P121652	O	O		
<i>Deparia</i> × <i>angustatum</i> (Nakai) Nakaike 개좁진고사리 KHB1263688		O		
<i>Deparia conilii</i> (Franch. & Sav.) M.Kato 좁진고사리 P121848	O	O		
<i>Deparia coreana</i> (Christ) M.Kato 곱새고사리 P125489	O	O		
<i>Deparia japonica</i> (Thunb.) M.Kato 진고사리 P120592	O	O		
<i>Deparia kiusiana</i> (Koidz.) M.Kato 털진고사리 P123220		O		
<i>Deparia lasiopteris</i> (Kunze) Nakaike 큰진고사리 P122419		O		
<i>Deparia okuboana</i> (Makino) M.Kato 진퍼리개고사리 KNKA200408021067		O		
<i>Deparia pterorachis</i> (Christ) M.Kato 왕고사리 P121700	O	O		
<i>Deparia pycnosora</i> (Christ) M.Kato 털고사리 P0154	O	O		
<i>Diplazium squamigerum</i> (Mett.) Matsum. 내장고사리	O			
<i>Onoclea orientalis</i> (Hk.) Hk. 개면마 P0249	O	O		
<i>Woodsia polystichoides</i> D.C.Eaton 우드풀 P121738	O	O		
Polypodiaceae 고란초과				
<i>Crypsinus hastatus</i> (Thunb.) Copel. 고란초 KHB1040202	O	O		
<i>Lemmaphyllum microphyllum</i> C.Presl 콩짜개덩굴 P120368	O	O		
<i>Lepisorus onoei</i> (Franch. & Sav.) Ching 애기일엽초	O			
<i>Lepisorus thunbergianus</i> (Kaulf.) Ching 일엽초 P120022	O	O		
<i>Lepisorus ussuriensis</i> (Regel & Maack) Ching 산일엽초 P126036	O	O		
<i>Neocheiropteris ensata</i> (Thunb.) Ching 밭일엽	O			
<i>Polypodium vulgare</i> L. 미역고사리 P121615	O	O		
<i>Pyrrosia hastata</i> (Thunb. ex Houtt.) Ching 세뿔석위	O			
<i>Pyrrosia linearifolia</i> (Hk.) Ching 우단일엽	O			
<i>Pyrrosia petiolosa</i> (Christ. & Baroni) Ching 애기석위	O			
Ginkgoaceae 은행나무과				
<i>Ginkgo biloba</i> L. 은행나무	O			
Pinaceae 소나무과				
<i>Cedrus deodara</i> (Roxb.) Loudon 개잎갈나무	O			
<i>Larix kaempferi</i> (Lamb.) Carri� 일본잎갈나무	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Picea jezoensis</i> (Siebold & Zucc.) Carrière 가문비나무	O			
<i>Pinus densiflora</i> Siebold & Zucc. 소나무 P0145	O	O		
<i>Pinus densiflora</i> f. <i>multicaulis</i> Uyeki 반송	O			
<i>Pinus parviflora</i> Siebold & Zucc. 섬잣나무 P121601	O	O		
<i>Pinus rigida</i> Mill. 리기다소나무	O			
<i>Pinus thunbergii</i> Parl. 곰솔 P120012	O	O	O	O
<i>Tsuga sieboldii</i> Carrière 솔송나무 P121648	O	O		
Taxodiaceae 낙우송과				
<i>Cryptomeria japonica</i> (L.f.) D.Don 삼나무 P123079	O	O		
Cupressaceae 측백나무과				
<i>Chamaecyparis obtusa</i> (Siebold & Zucc.) Endl. 편백 KHB1040260	O	O		
<i>Juniperus chinensis</i> L. 향나무 KHB1040262	O	O		
<i>Juniperus rigida</i> Siebold & Zucc. 노간주나무	O			
<i>Juniperus virginiana</i> L. 연필향나무	O			
<i>Thuja orientalis</i> L. 측백나무 P120060	O	O		
Cephalotaxaceae 개비자나무과				
<i>Cephalotaxus koreana</i> Nakai 개비자나무	O			
Taxaceae 주목과				
<i>Taxus baccata</i> var. <i>latifolia</i> Nakai 회솔나무 KHB1040227	O	O		
<i>Taxus cuspidata</i> Siebold & Zucc. 주목	O			
Juglandaceae 가래나무과				
<i>Juglans regia</i> Dode 호두나무	O			
Salicaceae 버드나무과				
<i>Populus deltoides</i> Marsh. 미류나무	O			
<i>Populus nigra</i> var. <i>italica</i> (Müch) Koehne 양버들	O			
<i>Salix caprea</i> L. 호랑버들	O			
<i>Salix graciligrans</i> Nakai 눈갯버들	O			
<i>Salix gracilistyla</i> Miq. 갯버들	O			
<i>Salix ishidoyana</i> Nakai 섬버들 KHB1040308	O	O		
<i>Salix koreensis</i> Andersson 버드나무 P120511	O	O		
<i>Salix koriyanagi</i> Kimura 키버들	O			
<i>Salix matsudana</i> f. <i>tortuosa</i> Rehder 용버들	O			
<i>Salix siuzevii</i> Seem. 참오글잎버들	O			
<i>Salix subfragilis</i> Andersson 선버들	O			
Betulaceae 자작나무과				
<i>Alnus borealis</i> Koidz. 떡오리나무	O			
<i>Alnus firma</i> Siebold & Zucc. 사방오리 P120019	O	O		
<i>Alnus japonica</i> var. <i>koreana</i> Callier 털오리나무	O			
<i>Alnus maximowiczii</i> Callier 두메오리나무 P121660	O	O		O
<i>Alnus sibirica</i> Fisch. ex Turcz. 물오리나무 P123090	O	O		
<i>Carpinus cordata</i> Blume 까치박달	O			
<i>Carpinus laxiflora</i> (Siebold & Zucc.) Blume 서어나무	O			
<i>Carpinus turczaninowii</i> Hance 소사나무 P120433		O		
<i>Corylus hallaisanensis</i> Nakai 병개암나무	O			
<i>Corylus heterophylla</i> Fisch. ex Trautv. 개암나무	O			
<i>Corylus sieboldiana</i> var. <i>mandshurica</i> (Maxim. & Rupr.) C.K.Schneid. 물개암나무	O			
Fagaceae 참나무과				
<i>Castanea crenata</i> Siebold & Zucc. 밤나무 P0130	O	O		
<i>Fagus engleriana</i> Seemen ex Diels 너도밤나무 P123352	O	O		
<i>Quercus acuta</i> Thunb. 붉가시나무	O			
<i>Quercus acutissima</i> Carruth. 상수리나무	O			
<i>Quercus mongolica</i> Fisch. ex Ledeb. 신갈나무	O			
<i>Quercus salicina</i> Blume 참가시나무 KHB1040410	O	O		
<i>Quercus serrata</i> Thunb. 졸참나무	O			
<i>Quercus variabilis</i> Blume 굴참나무	O			
Ulmaceae 느릅나무과				
<i>Aphananthe aspera</i> (Thunb.) Planch. 푸조나무 P122043	O	O		
<i>Celtis bungeana</i> Blume 졸풍계나무	O			
<i>Celtis choseniana</i> Nakai 검팽나무 KHB1040417	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Celtis jessoensis</i> Koidz. 풍계나무 <i>P121668</i>	O	O	O	
<i>Celtis sinensis</i> Pers. 팽나무 <i>P120160</i>	O	O		
<i>Ulmus davidiana</i> var. <i>japonica</i> (Rehder) Nakai 느릅나무 <i>P123046</i>	O	O		
<i>Ulmus laciniata</i> (Trautv.) Mayr 난티나무 <i>P121593</i>	O	O		
<i>Ulmus macrocarpa</i> Hance 왕느릅나무	O			
<i>Zelkova serrata</i> (Thunb.) Makino 느티나무 <i>KHB1040436</i>	O	O		
Eucommiaceae 두충과				
<i>Eucommia ulmoides</i> Oliv. 두충 <i>KHB1261362</i>	O	O		
Moraceae 뽕나무과				
<i>Broussonetia kazinoki</i> Siebold 닥나무	O			
<i>Broussonetia papyrifera</i> (L.) L'Hé. ex Vent. 꾸지나무 <i>P120241</i>	O	O	O	
<i>Fatoua villosa</i> (Thunb.) Nakai 뽕모시풀	O			
<i>Ficus carica</i> L. 무화과나무 <i>P123054</i>	O	O		
<i>Morus alba</i> L. 뽕나무 <i>P120943</i>	O	O		
<i>Morus bombycis</i> f. <i>dissecta</i> Nakai 가새뽕나무 <i>KHB1040453</i>	O			O
<i>Morus bombycis</i> Koidz. 산뽕나무 <i>P120757</i>	O	O	O	O
<i>Morus bombycis</i> var. <i>maritima</i> Koidz. 섬뽕나무 <i>KHB1040451</i>	O	O		
<i>Morus cathayana</i> Hemsl. 돌뽕나무	O			
Cannabaceae 삼과				
<i>Cannabis sativa</i> L. 삼	O			
<i>Humulus japonicus</i> Siebold & Zucc. 환삼덩굴 <i>P122684</i>	O	O		
Urticaceae 켄기풀과				
<i>Boehmeria longispica</i> Steud. 왜모시풀 <i>P121764</i>	O	O		
<i>Boehmeria nivea</i> (L.) Gaudich. 모시풀 <i>P123481</i>	O	O		
<i>Boehmeria nivea</i> var. <i>nipponnivea</i> (Koidz.) W.T.Wang 섬모시풀 <i>P123518</i>		O		
<i>Boehmeria pannosa</i> Nakai & Satake 왕모시풀	O			
<i>Boehmeria platanifolia</i> Franch. & Sav. 개모시풀	O			
<i>Boehmeria spicata</i> (Thunb.) Thunb. 쯤깨잎나무 <i>P121574</i>	O	O		
<i>Boehmeria tricuspis</i> (Hance) Makino 거북꼬리 <i>P121596</i>	O	O		
<i>Boehmeria tricuspis</i> var. <i>unicuspis</i> Makino 풀거북꼬리 <i>P123056</i>	O	O		
<i>Pilea hamaoi</i> Makino 큰물통이 <i>KHB1253687</i>	O	O		
<i>Pilea japonica</i> (Maxim.) Hand.-Mazz. 산물통이 <i>P121219</i>	O	O		
<i>Pilea mongolica</i> Wedd. 모시물통이 <i>P0026</i>	O	O		
<i>Urtica laetevirens</i> Maxim. 애기켄기풀 <i>P121698</i>	O	O		O
<i>Urtica thunbergiana</i> Siebold & Zucc. 켄기풀 <i>P123276</i>	O	O		O
Santalaceae 단향과				
<i>Thesium chinense</i> Turcz. 제비꽃	O			
Loranthaceae 꼬리겨우살이과				
<i>Viscum album</i> var. <i>coloratum</i> (Kom.) Ohwi 겨우살이 <i>P125650</i>	O	O		
Polygonaceae 마디풀과				
<i>Bistorta tenuicaulis</i> (Bisset & S.Moore) Nakai 이른범꼬리	O			
<i>Fagopyrum esculentum</i> Moench 메밀	O			
<i>Fallopia ciliinervis</i> (Nakai) Hammer 나도하수오 <i>KHB1253560</i>		O		
<i>Fallopia dentatolata</i> (F.Schmidt) Holub 큰닭의덩굴 <i>P0232</i>	O	O		
<i>Fallopia dumetorum</i> (L.) Holub 닭의덩굴 <i>P0021</i>	O	O		
<i>Fallopia pauciflora</i> (Maxim.) Kitag. 애기닭의덩굴	O			
<i>Fallopia sachalinensis</i> (F.Schmidt) Ronse Decr. 왕호장근 <i>P121642</i>	O	O		
<i>Persicaria conspicua</i> (Nakai) Nakai ex Mori 꽃여뀌	O			
<i>Persicaria dissitiflora</i> (Hemsl.) H.Gross ex Mori 가시여뀌	O			
<i>Persicaria filiformis</i> (Thunb.) Nakai ex Mori 이삭여뀌 <i>P122917</i>	O	O		
<i>Persicaria hydropiper</i> (L.) Spach 여뀌 <i>P0062</i>	O	O		
<i>Persicaria japonica</i> (Meisn.) H.Gross ex Nakai 흰꽃여뀌	O			
<i>Persicaria lapathifolia</i> (L.) Gray 흰여뀌 <i>KHB1255898</i>	O	O		
<i>Persicaria longiseta</i> (Brujin) Kitag. 개여뀌 <i>P0203</i>	O	O		O
<i>Persicaria nepalensis</i> (Meisn.) H.Gross 산여뀌 <i>P122976</i>	O	O		
<i>Persicaria nodosa</i> (Pers.) Opiz 큰개여뀌 <i>P122578</i>	O	O		O
<i>Persicaria perfoliata</i> (L.) H.Gross 머느리배꼽 <i>P123390</i>	O	O		
<i>Persicaria posumbu</i> var. <i>laxiflora</i> (Meisn.) H.Hara 장대여뀌 <i>P122744</i>	O	O		
<i>Persicaria sagittata</i> (L.) H.Gross ex Nakai 미꾸리낚시 <i>P0028</i>		O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Persicaria senticosa</i> (Meisn.) H.Gross ex Nakai 머느리밀췌개	O			
<i>Persicaria thunbergii</i> (Siebold & Zucc.) H.Gross ex Nakai 코마리 P0056	O	O		
<i>Persicaria vulgaris</i> Webb & Moq. 봄여뀌	O			
<i>Polygonum arenastrum</i> Boreau 갯마디풀 KNKA200405282025	O	O		
<i>Polygonum aviculare</i> L. 마디풀 P121606	O	O		O
<i>Rumex acetosa</i> L. 수영	O			
<i>Rumex acetosella</i> L. 애기수영 P120726	O	O		
<i>Rumex aquaticus</i> L. 토대황	O			
<i>Rumex conglomeratus</i> Murray 목발소리쟁이	O			
<i>Rumex crispus</i> L. 소리쟁이 P120338	O	O	O	
<i>Rumex japonicus</i> Houtt. 참소리쟁이 P121000	O	O		O
<i>Rumex longifolius</i> DC. 개대황	O			
<i>Rumex nipponicus</i> Franch. & Sav. 좁소리쟁이 P121693	O	O		
<i>Rumex obtusifolius</i> L. 돌소리쟁이 P121078	O	O		
<i>Rumex patientia</i> L. 부령소리쟁이 P120436		O	O	
Phytolaccaceae 자리공과				
<i>Phytolacca esculenta</i> Van Houtte 자리공	O			
<i>Phytolacca insularis</i> Nakai 섬자리공 P121586	O	O		
Aizoaceae 번행초과				
<i>Tetragonia tetragonoides</i> (Pall.) Kuntze 번행초 P121156	O	O		
Portulacaceae 쇠비름과				
<i>Portulaca oleracea</i> L. 쇠비름 P0172	O	O	O	O
Caryophyllaceae 석죽과				
<i>Agrostemma githago</i> L. 선웅초	O			
<i>Arenaria serpyllifolia</i> L. 벼룩이자리 P120530	O	O		
<i>Cerastium glomeratum</i> Thuill. 유럽점나도나물 P120014	O	O		
<i>Cerastium holosteoides</i> var. <i>hallaisanense</i> (Nakai) Mizush. 점나도나물 P125576	O	O		
<i>Cucubalus baccifer</i> var. <i>japonicus</i> Miq. 덩굴별꽃	O			
<i>Dianthus chinensis</i> L. 패랭이꽃 P122074	O	O		
<i>Dianthus littorosus</i> Makino ex Nakai 섬패랭이꽃	O	O		
<i>Dianthus longicalyx</i> Miq. 솔패랭이꽃 P123111	O	O	O	
<i>Dianthus superbus</i> var. <i>alpestris</i> Kablik. ex Celak. 구름패랭이꽃	O			
<i>Pseudostellaria heterophylla</i> (Miq.) Pax ex Pax & Hoffm. 개별꽃	O			
<i>Sagina japonica</i> (Sw.) Ohwi 개미자리 P120608	O	O		
<i>Sagina maxima</i> A.Gray 큰개미자리 P120216	O	O		O
<i>Silene aprica</i> Turcz. ex Fisch. & C.A.Mey. 애기장구채 KHB1040638	O	O		
<i>Silene aprica</i> var. <i>oldhamiana</i> (Miq.) C.Y.Wu 갯장구채 P120264	O	O		
<i>Silene armeria</i> L. 끈끈이대나물 P0196	O	O		
<i>Silene firma</i> Siebold & Zucc. 장구채 P0018	O	O		
<i>Silene firma</i> f. <i>pubescens</i> (Makino) Makino 털장구채	O			
<i>Silene gallica</i> L. 양장구채 P121124	O	O		
<i>Silene alba</i> (Mill.) E.H.L.Krause 달맞이장구채 P121925	O	O		
<i>Silene takeshimensis</i> Uyeki & Sakata 울릉장구채 P123342	O	O		
<i>Spergularia marina</i> (L.) Griseb. 갯개미자리	O			
<i>Spergularia rubra</i> J.Presl & C.Presl 유럽개미자리	O			
<i>Stellaria alsine</i> var. <i>undulata</i> (Thunb.) Ohwi 벼룩나물 P120300	O	O		
<i>Stellaria aquatica</i> (L.) Scop. 쇠별꽃 P120598	O	O		
<i>Stellaria diffusa</i> Willd. ex Schldt. 애기가지별꽃	O			
<i>Stellaria media</i> (L.) Vill. 별꽃 P0209	O	O	O	
<i>Stellaria neglecta</i> Weihe ex Bluff & Fingerh. 초록별꽃 P120093		O	O	
<i>Vaccaria vulgaris</i> Host 말뱅이나물	O			
Chenopodiaceae 명아주과				
<i>Atriplex gmelinii</i> C.A.Mey. 가는갯는쟁이 P123097	O	O		
<i>Atriplex subcordata</i> Kitag. 갯는쟁이 KNKA200405282040	O	O		
<i>Beta vulgaris</i> var. <i>cicla</i> L. 근대 P121695		O		
<i>Chenopodium album</i> L. 흰명아주 P0055	O	O	O	O
<i>Chenopodium album</i> var. <i>centrorubrum</i> Makino 명아주 P0017	O	O		
<i>Chenopodium album</i> var. <i>stenophyllum</i> Makino 가는명아주 P123157		O	O	
<i>Chenopodium ambrosioides</i> L. 양명아주 P123515	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Chenopodium bryoniaefolium</i> Bunge 청명아주	O			
<i>Chenopodium ficifolium</i> Smith 좁명아주 P121049	O	O		
<i>Chenopodium glaucum</i> L. 취명아주 P122007	O	O		
<i>Kochia scoparia</i> (L.) Schrad. 땃싸리 P122982	O	O		
<i>Salicornia europaea</i> L. 통통마디	O			
<i>Suaeda glauca</i> (Bunge) Bunge 나문재	O			
Amaranthaceae 비름과				
<i>Achyranthes fauriei</i> H.Lév. & Vaniot 털쇠무릎 P122721		O	O	O
<i>Achyranthes japonica</i> (Miq.) Nakai 쇠무릎 P122890	O	O	O	O
<i>Amaranthus blitum</i> L. 개비름	O			
<i>Amaranthus mangostanus</i> L. 비름	O			
<i>Amaranthus patulus</i> Bertol. 가는털비름 P0050		O		
<i>Amaranthus retroflexus</i> L. 털비름	O			
<i>Amaranthus hybridus</i> L. 긴털비름 P123730		O		
Magnoliaceae 목련과				
<i>Magnolia sieboldii</i> K.Koch 함박꽃나무	O			
Schisandraceae 오미자과				
<i>Schisandra chinensis</i> (Turcz.) Baill. 오미자	O			
Lauraceae 녹나무과				
<i>Cinnamomum japonicum</i> Siebold ex Nees 생달나무	O			
<i>Lindera erythrocarpa</i> Makino 비목나무	O			
<i>Lindera obtusiloba</i> Blume 생강나무	O			
<i>Litsea japonica</i> (Thunb.) Juss. 까마귀쪽나무	O			
<i>Machilus thunbergii</i> Siebold & Zucc. 후박나무 P121223	O	O	O	O
<i>Neolitsea sericea</i> (Blume) Koidz. 참식나무 P121870	O	O		
Ranunculaceae 미나리아재비과				
<i>Aconitum pseudolaevae</i> Nakai 진범	O			
<i>Anemone reflexa</i> Steph. & Willd. 회리바람꽃	O			
<i>Caltha palustris</i> L. 동의나물	O			
<i>Cimicifuga foetida</i> L. 황새송마	O			
<i>Clematis apiifolia</i> DC. 사위질뽕 P0132	O	O		
<i>Clematis brevicaudata</i> DC. 좁사위질뽕	O			
<i>Clematis terniflora</i> DC. 참으아리 KHB1255300	O	O		
<i>Clematis terniflora</i> var. <i>mandshurica</i> (Rupr.) Ohwi 으아리 P123503		O		
<i>Clematis trichotoma</i> Nakai 할미밀망	O			
<i>Hepatica maxima</i> Nakai 섬노루귀 P121633	O	O		
<i>Pulsatilla koreana</i> (Yabe ex Nakai) Nakai ex Mori 할미꽃	O			
<i>Ranunculus cantoniensis</i> DC. 털개구리미나리 P122004		O		
<i>Ranunculus chinensis</i> Bunge 젓가락나물	O			
<i>Ranunculus japonicus</i> Thunb. 미나리아재비	O			
<i>Ranunculus quelpaertensis</i> (H.Lév.) Nakai 왜젓가락나물 P121830	O	O		
<i>Ranunculus sceleratus</i> L. 개구리자리 P120587	O	O		
<i>Thalictrum aquilegifolium</i> var. <i>sibiricum</i> Regel & Tiling 췌의다리 KHB1255458	O	O		
<i>Thalictrum filamentosum</i> var. <i>tenerum</i> (Huth) Ohwi 산췌의다리	O			
<i>Thalictrum kemense</i> Fr. 큰췌의다리	O			
<i>Thalictrum kemense</i> var. <i>hypoleucum</i> (Siebold & Zucc.) Kitag. 좁췌의다리 P123134	O	O	O	O
<i>Thalictrum rochebrunianum</i> var. <i>grandisepalum</i> (H.Lév.) Nakai 금췌의다리	O			
<i>Thalictrum sachalinense</i> Lecoy. 뿔췌의다리	O			
<i>Thalictrum sparsiflorum</i> Turcz. ex Fisch. & C.A.Mey. 발톱췌의다리	O			
Berberidaceae 매자나무과				
<i>Berberis amurensis</i> var. <i>latifolia</i> Nakai 왕매발톱나무 P121632	O	O		
<i>Berberis amurensis</i> var. <i>quelpaertensis</i> Nakai 섬매발톱나무	O			
Lardizabalaceae 으름덩굴과				
<i>Akebia quinata</i> (Thunb.) Decne. 으름덩굴 P120202	O	O		
<i>Stauntonia hexaphylla</i> (Thunb.) Decne. 멸꿀	O			
Menispermaceae 새모래덩굴과				
<i>Cocculus trilobus</i> (Thunb.) DC. 땡땡이덩굴 P121541	O	O	O	O
<i>Menispermum dauricum</i> DC. 새모래덩굴	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
Nymphaeaceae 수련과				
<i>Nymphaea tetragona</i> Georgi 수련	O			
Saururaceae 삼백초과				
<i>Houttuynia cordata</i> Thunb. 약모밀 P121581	O	O		
<i>Saururus chinensis</i> (Lour.) Baill. 삼백초	O			
Aristolochiaceae 쥐방울덩굴과				
<i>Asarum sieboldii</i> Miq. 죽도리풀	O			
Paeoniaceae 작약과				
<i>Paeonia lactiflora</i> Pall. 작약 KHB1274480		O		
<i>Paeonia obovata</i> Maxim. 산작약	O			
<i>Paeonia suffruticosa</i> Andr. 모란	O			
Actinidiaceae 다래나무과				
<i>Actinidia arguta</i> (Siebold & Zucc.) Planch. ex Miq. 다래 P125204	O	O		
<i>Actinidia kolomikta</i> (Maxim. & Rupr.) Maxim. 쥐다래 KHB1041669	O	O		
<i>Actinidia polygama</i> (Siebold & Zucc.) Planch. ex Maxim. 개다래 P121758	O	O		
Theaceae 차나무과				
<i>Camellia japonica</i> L. 동백나무 P120045	O	O	O	O
<i>Eurya japonica</i> Thunb. 사스레피나무	O			
Guttiferae 물레나무과				
<i>Hypericum ascyron</i> L. 물레나무 P125906		O		
<i>Hypericum erectum</i> Thunb. 고추나무 P122932	O	O		
<i>Hypericum japonicum</i> Thunb. 애기고추나무	O			
<i>Triadenum japonicum</i> (Blume) Makino 물고추나무	O			
Papaveraceae 양귀비과				
<i>Chelidonium majus</i> var. <i>asiaticum</i> (H.Hara) Ohwi 애기똥풀 P120827	O	O		
<i>Coreanomecon hylomeconoides</i> Nakai 매미꽃	O			
Fumariaceae 현호색과				
<i>Corydalis filistipes</i> Nakai 섬현호색 KHB1255626	O	O		
<i>Corydalis heterocarpa</i> Siebold & Zucc. 염주괴불주머니 P120105	O	O		
<i>Corydalis incisa</i> (Thunb.) Pers. 자주괴불주머니	O			
<i>Corydalis ochotensis</i> Turcz. 눈괴불주머니	O			
<i>Corydalis pallida</i> (Thunb.) Pers. 괴불주머니	O			
<i>Corydalis pauciovulata</i> Ohwi 선괴불주머니	O			
<i>Corydalis platycarpa</i> (Maxim.) Makino 갯괴불주머니 P121158	O	O	O	
<i>Corydalis speciosa</i> Maxim. 산괴불주머니 P125586	O	O		
Cruciferae 십자화과				
<i>Arabis hirsuta</i> (L.) Scop. 털장대 P125230		O		
<i>Arabis stelleri</i> DC. 갯장대 P121805	O	O	O	
<i>Arabis takesimana</i> Nakai 섬장대 P121618	O	O		
<i>Barbarea vulgaris</i> R.Br. 유럽나도냉이 KHB1255730		O		
<i>Brassica juncea</i> (L.) Czern. 갯 P120077	O	O		O
<i>Brassica napus</i> L. 유채 P121018	O	O		
<i>Brassica oleracea</i> var. <i>capitata</i> L. 양배추	O			
<i>Brassica rapa</i> var. <i>glabra</i> Regel 배추	O			
<i>Capsella bursa-pastoris</i> (L.) L.W.Medicus 냉이 P0206	O	O		
<i>Cardamine fallax</i> L. 좁쌀냉이 P120881	O	O		
<i>Cardamine flexuosa</i> With. 황새냉이 P0207	O	O		
<i>Cardamine impatiens</i> L. 싸리냉이 P125167	O	O		
<i>Cardamine impatiens</i> var. <i>obtusifolia</i> (Knaf) O.E.Schulz 섬싸리냉이	O			
<i>Cardamine leucantha</i> (Tausch) O.E.Schulz 미나리냉이	O			
<i>Cardamine scutata</i> Thunb. 큰황새냉이 P121114	O	O		
<i>Draba nemorosa</i> L. 꽃다지 P120841	O	O		
<i>Lepidium apetalum</i> Willd. 다닥냉이 P120843	O	O		
<i>Lepidium virginicum</i> L. 콩다닥냉이 P120584	O	O		
<i>Nasturtium officinale</i> R.Br. 물냉이	O			
<i>Raphanus sativus</i> L. 무	O			
<i>Raphanus sativus</i> var. <i>hortensis</i> f. <i>raphanistroides</i> Makino 갯무 P121147	O	O		
<i>Rorippa indica</i> (L.) Hiern 개갯냉이 P120857	O	O		
<i>Rorippa palustris</i> (Leyss.) Besser 속속이풀 P0177	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Sisymbrium officinale</i> (L.) Scop. 유럽장대 P121617	O	O		
<i>Wasabia japonica</i> (Miq.) Matsum. 고추냉이 P123277	O	O		
Platanaceae 버즘나무과				
<i>Platanus orientalis</i> L. 버즘나무	O			
Hamamelidaceae 조록나무과				
<i>Corylopsis gotoana</i> var. <i>coreana</i> (Uyeki) T.Yamaz. 히어리	O			
Crassulaceae 돌나물과				
<i>Hylotelephium spectabile</i> (Boreau) H.Ohba 큰평의비름	O			
<i>Orostachys iwarenge</i> (Makino) H.Hara 연화바위솔	O			
<i>Orostachys malacophyllus</i> (Pall.) Fisch. 둥근바위솔 KHB1253804	O	O		
<i>Rhodiola rosea</i> L. 바위돌꽃	O			
<i>Sedum aizoon</i> L. 가는기린초	O			
<i>Sedum bulbiferum</i> Makino 말뚝비름	O			
<i>Sedum japonicum</i> Siebold ex Miq. 돌채송화	O			
<i>Sedum kamtschaticum</i> Fisch. & Mey. 기린초	O			
<i>Sedum middendorffianum</i> Maxim. 애기기린초	O			
<i>Sedum oryzifolium</i> Makino 땅채송화 P120440	O	O	O	
<i>Sedum sarmentosum</i> Bunge 돌나물 P121063	O	O		
<i>Sedum takesimense</i> Nakai 섬기린초 P121629	O	O	O	O
Saxifragaceae 범의귀과				
<i>Astilbe koreana</i> (Kom.) Nakai 숙은노루오줌	O			
<i>Astilbe rubra</i> Hook.f. & Thomas ex Hook.f. 노루오줌 P121687	O	O		
<i>Chrysosplenium flagelliferum</i> F.Schmidt 애기팽이눈 P120145	O	O		
<i>Chrysosplenium grayanum</i> Maxim. 팽이눈	O			
<i>Chrysosplenium japonicum</i> (Maxim.) Makino 산팽이눈 P121571-2	O	O		
<i>Deutzia glabrata</i> Kom. 물참대	O			
<i>Hydrangea macrophylla</i> f. <i>otaksa</i> (Siebold & Zucc.) Wilson 수국	O			
<i>Hydrangea petiolaris</i> Siebold & Zucc. 등수국 P121638	O	O		
<i>Hydrangea serrata</i> f. <i>acuminata</i> (Siebold & Zucc.) Wilson 산수국	O			
<i>Parnassia palustris</i> L. 물매화	O			
<i>Philadelphus schrenkii</i> Rupr. 고광나무	O			
<i>Philadelphus schrenkii</i> var. <i>jackii</i> Koehne 털고광나무	O			
<i>Philadelphus tenuifolius</i> Rupr. & Maxim. 얇은잎고광나무	O			
<i>Ribes maximowiczianum</i> Kom. 명자순	O			
<i>Saxifraga fortunei</i> var. <i>incisulobata</i> (Engl. & Irmsch.) Nakai 바위떡풀 P0268	O	O		
<i>Saxifraga fortunei</i> var. <i>pilosissima</i> Nakai 털바위떡풀 KNKA200405122009	O	O		
<i>Schizophragma hydrangeoides</i> Siebold & Zucc. 바위수국 P121566	O	O		
<i>Tiarella polyphylla</i> D.Don 혈떡이풀 P123240	O	O		
Pittosporaceae 돈나무과				
<i>Pittosporum tobira</i> (Thunb.) W.T.Aiton 돈나무	O			
Rosaceae 장미과				
<i>Agrimonia coreana</i> Nakai 산쥬신나물	O			
<i>Agrimonia pilosa</i> Ledeb. 쥬신나물 P123357	O	O		
<i>Aruncus dioicus</i> var. <i>kamtschaticus</i> (Maxim.) H.Hara 눈개승마 P121956	O	O		
<i>Chaenomeles sinensis</i> (Thouin) Koehne 모과나무	O			
<i>Cotoneaster wilsonii</i> Nakai 섬개야광나무 P122018	O	O		
<i>Duchesnea indica</i> (Andr.) Focke 뱀딸기 P120198	O	O		O
<i>Eriobotrya japonica</i> (Thunb.) Lindl. 비파나무	O			
<i>Fragaria ananassa</i> Duch. 딸기 KHB1041158		O		
<i>Fragaria nipponica</i> Makino 흰딸기	O			
<i>Geum aleppicum</i> Jacq. 큰뱀무	O			
<i>Geum japonicum</i> Thunb. 뱀무 P122931	O	O		
<i>Kerria japonica</i> (L.) DC. 황매화	O			
<i>Kerria japonica</i> f. <i>pleniflora</i> (Witte) Rehder 죽단화	O			
<i>Malus baccata</i> var. <i>mandshurica</i> (Maxim.) C.K.Schneid. 털야광나무	O			
<i>Malus punila</i> Mill. 사과나무	O			
<i>Physocarpus insularis</i> (Nakai) Nakai 섬국수나무 P121610	O	O		
<i>Physocarpus intermedius</i> C.K.Schneid. 중산국수나무	O			
<i>Potentilla chinensis</i> Ser. 딱지꽃	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Potentilla dickinsii</i> Franch. & Sav. 돌양지꽃	O			
<i>Potentilla dickinsii</i> var. <i>glabrata</i> Nakai 섬양지꽃 KHB1041174	O	O		
<i>Potentilla freyniana</i> Bornm. 세잎양지꽃 P120213	O	O		
<i>Pourthiaea villosa</i> (Thunb.) Decne. 윤노리나무 P120185	O	O		
<i>Prunus armeniaca</i> var. <i>ansu</i> Maxim. 살구나무	O			
<i>Prunus glandulosa</i> f. <i>albiplena</i> Koehne 옥매	O			
<i>Prunus mume</i> Siebold & Zucc. 매실나무	O			
<i>Prunus persica</i> (L.) Batsch 복사나무 P120613	O	O		
<i>Prunus salicina</i> Lindl. 자두나무	O			
<i>Prunus sargentii</i> Rehder 산벚나무	O			
<i>Prunus takesimensis</i> Nakai 섬벚나무 P121600	O	O	O	
<i>Prunus yedoensis</i> Matsum. 왕벚나무	O			
<i>Pyrus pyrifolia</i> (Burm.f.) Nakai 돌배나무 P121587	O	O		
<i>Pyrus pyrifolia</i> var. <i>culta</i> (Makino) Nakai 배나무 KHB1274351	O	O		
<i>Pyrus ussuriensis</i> Maxim. 산돌배 P120257	O	O		
<i>Pyrus ussuriensis</i> var. <i>macrostipes</i> (Nakai) T.B.Lee 참배	O			
<i>Rosa maximowicziana</i> Regel 용가시나무	O			
<i>Rosa multiflora</i> Thunb. 찔레꽃 P121068	O	O		O
<i>Rosa multiflora</i> var. <i>platyphylla</i> Thory 덩굴장미	O			
<i>Rosa rugosa</i> Thunb. 해당화	O			
<i>Rosa wichuraiana</i> Crep. ex Franch. & Sav. 돌가시나무	O			
<i>Rubus corchorifolius</i> L.f. 수리딸기	O			
<i>Rubus idaeus</i> var. <i>microphyllus</i> Turcz. 명덕딸기	O			
<i>Rubus oldhamii</i> Miq. 줄딸기	O			
<i>Rubus parvifolius</i> L. 명석딸기 P0174	O	O		
<i>Rubus phoenicolasius</i> Maxim. 곰딸기 P121997	O	O		
<i>Rubus schizostylus</i> H.Lév. 가시복분자	O			
<i>Rubus takesimensis</i> Nakai 섬나무딸기 P121588	O	O	O	O
<i>Sanguisorba officinalis</i> L. 오이풀 P123349	O	O		
<i>Sorbaria sorbifolia</i> var. <i>stellipila</i> Maxim. 쉬땅나무 P0079	O	O		
<i>Sorbus alnifolia</i> (Siebold & Zucc.) K.Koch 팔배나무	O			
<i>Sorbus amurensis</i> Koehne 당마가목 KHB1041140	O	O		
<i>Sorbus commixta</i> Hedlund 마가목 P121694	O	O		
<i>Sorbus commixta</i> f. <i>rufo-hirtella</i> Nakai 왕털마가목	O			
<i>Spiraea blumei</i> G.Don 산조팝나무 P125578	O	O		
<i>Spiraea fritschiana</i> Schneid. 참조팝나무	O			
<i>Stephanandra incisa</i> (Thunb.) Zabel 국수나무 P120650	O	O		
Leguminosae 콩과				
<i>Aeschynomene indica</i> L. 자귀풀	O			
<i>Albizia julibrissin</i> Durazz. 자귀나무 P122123	O	O		
<i>Amorpha fruticosa</i> L. 족제비싸리 P120438	O	O	O	
<i>Amphicarpea bracteata</i> subsp. <i>edgeworthii</i> (Benth.) H.Ohashi 새콩 P0139	O	O		
<i>Astragalus membranaceus</i> Bunge 황기	O			
<i>Caragana sinica</i> (Buc'hoz) Rehder 골담초	O			
<i>Cercis chinensis</i> Bunge 박태기나무	O			
<i>Chamaecrista nomame</i> (Siebold) H.Ohashi 차풀	O			
<i>Desmodium oldhami</i> Oliv. 큰도둑놈의갈고리	O			
<i>Desmodium podocarpum</i> DC. 개도둑놈의갈고리 P122491	O	O		
<i>Desmodium podocarpum</i> var. <i>mandshuricum</i> Maxim. 애기도둑놈의갈고리 P123252	O	O		
<i>Desmodium podocarpum</i> var. <i>oxyphyllum</i> (DC.) H.Ohashi 도둑놈의갈고리 P122974	O	O		
<i>Glycine max</i> (L.) Merr. 콩	O			
<i>Glycine soja</i> Siebold & Zucc. 돌콩 P0006	O	O		
<i>Indigofera kirilowii</i> Maxim. ex Palib. 땅비싸리 P120272		O		
<i>Indigofera pseudotinctoria</i> Matsum. 낭아초 P122599	O	O		
<i>Kummerowia stipulacea</i> (Maxim.) Makino 둥근매듭풀	O			
<i>Kummerowia striata</i> (Thunb.) Schindl. 매듭풀	O			
<i>Lathyrus davidii</i> Hance 활랑나물	O			
<i>Lathyrus japonicus</i> Willd. 갯완두 P120263	O	O		
<i>Lespedeza bicolor</i> Turcz. 싸리 P0051	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Lespedeza bicolor</i> var. <i>typica</i> Maxim. 쯔몰싸리	O			
<i>Lespedeza cuneata</i> G.Don 비수리 P122769	O	O		
<i>Lespedeza cyrtobotrya</i> Miq. 참싸리 P0083	O	O		
<i>Lespedeza maritima</i> Nakai 해변싸리	O			
<i>Lespedeza maximowiczii</i> C.K.Schneid. 조록싸리	O			
<i>Lespedeza thunbergii</i> subsp. <i>formosa</i> (Vogel) H.Ohashi 풀싸리	O			
<i>Lespedeza tomentosa</i> (Thunb.) Siebold ex Maxim. 개싸리	O			
<i>Lespedeza virgata</i> (Thunb.) DC. 쯔몰싸리	O			
<i>Lotus corniculatus</i> var. <i>japonica</i> Regel 별노랑이 KHB1041368	O	O		
<i>Medicago lupulina</i> L. 잔개자리 P120177	O	O		
<i>Medicago polymorpha</i> L. 개자리 P120416	O	O		
<i>Medicago sativa</i> L. 자주개자리 P122617	O	O		
<i>Melilotus alba</i> Medicus 흰전동싸리 P121636	O	O		
<i>Melilotus suaveolens</i> Ledeb. 전동싸리 P122464	O	O		
<i>Phaseolus vulgaris</i> var. <i>humilis</i> Alef. 강낭콩	O			
<i>Pisum sativum</i> L. 완두 KHB1041386	O	O		
<i>Pisum sativum</i> var. <i>arvense</i> (L.) Trautv. 붉은완두	O			
<i>Pueraria lobata</i> (Willd.) Ohwi 칩 P122107	O	O		O
<i>Rhynchosia volubilis</i> Lour. 여우콩 KHB1041312	O	O		
<i>Robinia pseudoacacia</i> L. 아까시나무 P0060	O	O	O	O
<i>Sophora flavescens</i> Solander ex Aiton 고삼	O			
<i>Trifolium campestre</i> Schreb. 노랑토끼풀 P121183	O	O		
<i>Trifolium pratense</i> L. 붉은토끼풀 P0225	O	O		O
<i>Trifolium repens</i> L. 토끼풀 P0091	O	O		
<i>Vicia amoena</i> Fisch. ex DC. 갈퀴나물 P121309	O		O	
<i>Vicia amurensis</i> Oett. 별완두	O			
<i>Vicia angustifolia</i> L. ex Reichard 가는살갈퀴 P121570	O	O		
<i>Vicia angustifolia</i> var. <i>minor</i> (Bertol.) Ohwi 가는갈퀴 P121749	O	O		
<i>Vicia angustifolia</i> var. <i>segetills</i> (Thuill) K.Koch. 살갈퀴 P120219	O	O		
<i>Vicia anguste-pinnata</i> Nakai 가는갈퀴나물	O			
<i>Vicia cracca</i> L. 등갈퀴나물 KHB1041406	O	O		
<i>Vicia hirsuta</i> (L.) Gray 새완두 P120176	O	O		
<i>Vicia japonica</i> A.Gray 넓은잎갈퀴 P123153	O	O	O	
<i>Vicia tetrasperma</i> (L.) Schreb. 얼치기완두 P120256	O	O		
<i>Vicia unijuga</i> var. <i>ouensanensis</i> H.Lév. 큰나비나물	O			
<i>Vicia villosa</i> Roth 벳지	O			
<i>Vigna angularis</i> (Willd.) Ohwi & H.Ohashi 팥	O			
<i>Vigna umbellata</i> (Thunb.) Ohwi & H.Ohashi 덩굴팥 P122875		O		
<i>Wisteria floribunda</i> (Willd.) DC. 등	O			
Oxalidaceae 켁이밥과				
<i>Oxalis articulata</i> Sabigny 덩이켁이밥	O			
<i>Oxalis corniculata</i> L. 켁이밥 P120016	O	O		O
<i>Oxalis stricta</i> L. 선켁이밥 P0163	O	O	O	O
Geraniaceae 쥐손이풀과				
<i>Geranium carolinianum</i> L. 미국쥐손이 KHB1257142		O		
<i>Geranium knuthii</i> Nakai 큰세잎쥐손이	O			
<i>Geranium koreanum</i> Kom. 둥근이질풀	O			
<i>Geranium sibiricum</i> L. 쥐손이풀 P0027	O	O		
<i>Geranium thunbergii</i> Siebold & Zucc. 이질풀 P0066	O	O		
<i>Geranium wilfordii</i> Maxim. 세잎쥐손이 P122731	O	O		
Zygophyllaceae 남가새과				
<i>Tribulus terrestris</i> L. 남가새	O			
Euphorbiaceae 대극과				
<i>Acalypha australis</i> L. 깨풀 P0014	O	O		O
<i>Euphorbia esula</i> L. 흰대극 KHB1041500	O	O		
<i>Euphorbia helioscopia</i> L. 등대풀 P120006	O	O		
<i>Euphorbia humifusa</i> Willd. ex Schldt. 땅빈대 P124393	O	O		
<i>Euphorbia pekinensis</i> Rupr. 대극	O			
<i>Euphorbia supina</i> Raf. 애기땅빈대 P0033	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Phyllanthus ussuriensis</i> Rupr. & Maxim. 여우주머니 <i>P122687</i>	0	0		
<i>Ricinus communis</i> L. 피마자	0			
<i>Securinega suffruticosa</i> (Pall.) Rehder 광대싸리	0			
Daphniphyllaceae 굴거리나무과				
<i>Daphniphyllum macropodum</i> Miq. 굴거리나무 <i>P121739</i>	0	0		
<i>Daphniphyllum teijsmanni</i> Zoll. ex Kurz 좀굴거리나무	0			
Rutaceae 윤향과				
<i>Evodia daniellii</i> Hemsl. 쉬나무	0			
<i>Phellodendron amurense</i> Rupr. 황벽나무	0			
<i>Phellodendron amurense</i> var. <i>sachalinense</i> Fr.Schmidt 화태황벽나무	0	0		
<i>Poncirus trifoliata</i> Raf. 탕자나무 <i>KHB1041477</i>	0	0		
<i>Zanthoxylum ailanthoides</i> Siebold & Zucc. 머귀나무 <i>P121962</i>	0	0	0	
<i>Zanthoxylum piperitum</i> (L.) DC. 초피나무 <i>P125226</i>	0	0		
<i>Zanthoxylum schinifolium</i> Siebold & Zucc. 산초나무 <i>P122316</i>	0	0		
Simaroubaceae 소태나무과				
<i>Picrasma quassioides</i> (D.Don) Bennett 소태나무 <i>P121603</i>	0	0		
Meliaceae 멸구슬나무과				
<i>Cedrela sinensis</i> Juss. 참죽나무	0			
Polygalaceae 원지과				
<i>Polygala japonica</i> Houtt. 애기풀	0			
Anacardiaceae 쯔나무과				
<i>Rhus javanica</i> L. 붉나무 <i>P122190</i>	0	0		
<i>Rhus tricarpha</i> Miq. 개쯔나무	0			
<i>Rhus verniciflua</i> Stokes 쯔나무	0			
Aceraceae 단풍나무과				
<i>Acer mono</i> var. <i>savatieri</i> (Pax) Nakai 왕고로쇠나무	0			
<i>Acer palmatum</i> Thunb. 단풍나무	0			
<i>Acer pictum</i> Thunb. 털고로쇠나무	0			
<i>Acer pictum</i> subsp. <i>mono</i> (Maxim.) H.Ohahsi 고로쇠나무 <i>P120457</i>	0	0		
<i>Acer pseudosieboldianum</i> (Pax) Kom. 당단풍나무 <i>P0182</i>	0	0		
<i>Acer takesimensense</i> Nakai 섬단풍나무 <i>P121878</i>	0	0	0	
Balsaminaceae 봉선화과				
<i>Impatiens balsamina</i> L. 봉선화	0			
<i>Impatiens noli-tangere</i> L. 노랑물봉선 <i>P121746</i>	0	0		
<i>Impatiens nolitangere</i> var. <i>pallidescens</i> Nakai 미색물봉선	0			
<i>Impatiens textori</i> Miq. 물봉선 <i>P0007</i>	0	0		
Aquifoliaceae 감탕나무과				
<i>Ilex integra</i> Thunb. 감탕나무 <i>P120787</i>	0	0		
Celastraceae 노박덩굴과				
<i>Celastrus flagellaris</i> Rupr. 폰지나무	0			
<i>Celastrus orbiculatus</i> Thunb. 노박덩굴	0			
<i>Euonymus alatus</i> (Thunb.) Siebold 화살나무 <i>P120586</i>	0	0		
<i>Euonymus alatus</i> f. <i>ciliatodentatus</i> (Franch. & Sav.) Hiyama 회잎나무 <i>P120212</i>	0	0		
<i>Euonymus alatus</i> f. <i>pilosus</i> (Loes. & Rehder) Ohwi 털화살나무	0			
<i>Euonymus fortunei</i> (Turcz.) Hand.-Mazz. 좀사철나무	0			
<i>Euonymus fortunei</i> var. <i>radicans</i> (Miq.) Rehder 줄사철나무 <i>P121637</i>	0	0	0	
<i>Euonymus hamiltonianus</i> Wall. 참빗살나무 <i>P120203</i>		0		
<i>Euonymus japonicus</i> Thunb. 사철나무 <i>P122023</i>	0	0	0	0
<i>Euonymus macropterus</i> Rupr. 나래회나무	0			
<i>Euonymus oxyphyllus</i> Miq. 참회나무 <i>P120389</i>	0	0		
<i>Tripterygium regelii</i> Sprague & Takeda 미역줄나무	0			
Staphyleaceae 고추나무과				
<i>Euscaphis japonica</i> (Thunb.) Kanitz 말오줌때	0			
<i>Staphylea bumalda</i> DC. 고추나무	0			
Rhamnaceae 갈매나무과				
<i>Hovenia dulcis</i> Thunb. 헛개나무 <i>KHB1041607</i>	0	0		
<i>Rhamnus yoshinoi</i> Makino 짝자래나무	0			
<i>Sageretia theezans</i> f. <i>tomentosa</i> (C.K.Schneid.) H.Hara 털상동나무	0			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
Vitaceae 포도과				
<i>Ampelopsis brevipedunculata</i> (Maxim.) Trautv. 개머루 P0137	O	O	O	O
<i>Ampelopsis brevipedunculata</i> f. <i>ciliata</i> (Nakai) T.B.Lee 털개머루	O			
<i>Cayratia japonica</i> (Thunb.) Gagnep. 거지덩굴 P122502	O	O	O	
<i>Parthenocissus tricuspidata</i> (Siebold & Zucc.) Planch. 담쟁이덩굴 P120427	O	O		O
<i>Vitis amurensis</i> Rupr. 왕머루	O			
<i>Vitis coignetiae</i> Pulliat ex Planch. 머루 P121961	O	O	O	O
<i>Vitis coignetiae</i> f. <i>glabrescens</i> (Nakai) H.Hara 섬머루 KHB1041633	O	O		
<i>Vitis ficifolia</i> f. <i>glabrata</i> (Nakai) W.T.Lee 청까마귀머루	O			
<i>Vitis ficifolia</i> var. <i>sinuata</i> (Regel) H.Hara 까마귀머루 P122096	O			O
<i>Vitis flexuosa</i> Thunb. 새머루	O			
Tiliaceae 피나무과				
<i>Corchoropsis intermedia</i> Nakai 암까치깨	O			
<i>Corchoropsis tomentosa</i> (Thunb.) Makino 수까치깨	O			
<i>Grewia parviflora</i> Bunge 장구밤나무 P122062		O		
<i>Tilia amurensis</i> Rupr. 피나무	O			
<i>Tilia insularis</i> Nakai 섬피나무 P121640	O	O		
<i>Tilia rufa</i> Nakai 털피나무	O			
<i>Tilia taquetii</i> C.K.Schneid. 뽕잎피나무	O			
Malvaceae 아욱과				
<i>Abutilon theophrasti</i> Medicus 어저귀 P122746	O	O		
<i>Althaea rosea</i> Cav. 접시꽃	O			
<i>Hibiscus manihot</i> L. 닥풀	O			
<i>Hibiscus syriacus</i> L. 무궁화	O			
<i>Hibiscus trionum</i> L. 수박풀 P0042	O	O		
<i>Malva neglecta</i> Wallr. 난쟁이아욱 P121414	O	O		
<i>Malva sylvestris</i> var. <i>mauritanica</i> Boiss. 당아욱 P122002	O	O		
Sterculiaceae 벽오동과				
<i>Firmiana simplex</i> (L.) W.F.Wight 벽오동	O			
Elaeagnaceae 보리수나무과				
<i>Elaeagnus glabra</i> Thunb. 보리장나무 KHB1041751	O	O		
<i>Elaeagnus macrophylla</i> Thunb. 보리밤나무 P120009	O	O	O	O
<i>Elaeagnus umbellata</i> Thunb. 보리수나무	O			
<i>Elaeagnus umbellata</i> var. <i>coreana</i> (H.Lév.) H.Lév. 왕보리수나무	O			
Violaceae 제비꽃과				
<i>Viola acuminata</i> Ledeb. 졸방제비꽃	O			
<i>Viola albida</i> Palib. 태백제비꽃	O			
<i>Viola albida</i> f. <i>takahashii</i> (Makino) W.T.Lee 단풍제비꽃	O			
<i>Viola albida</i> var. <i>chaerophylloides</i> (Regel) F.Maek. 남산제비꽃 P120393	O	O		
<i>Viola blandaeformis</i> Nakai 엷은잎제비꽃	O			
<i>Viola boissieuana</i> Makino 각시제비꽃	O			
<i>Viola collina</i> Besser 둥근털제비꽃 P123001	O	O		
<i>Viola epipsila</i> Ledeb. 누운제비꽃	O			
<i>Viola grypoceras</i> A.Gray 뉘시제비꽃 P120034	O	O		
<i>Viola hirtipes</i> S.Moore 흰털제비꽃 KHB1041706		O		
<i>Viola hondoensis</i> W.Becker & H.Boissieu 아욱제비꽃 KNK4200405171107	O	O		
<i>Viola japonica</i> Langsdorf ex Ging. 왜제비꽃	O			
<i>Viola keiskei</i> Miq. 잔털제비꽃 P125428	O	O		
<i>Viola kusanoana</i> Makino 큰줄방제비꽃 P121771	O	O		
<i>Viola lactiflora</i> Nakai 흰젓제비꽃	O			
<i>Viola mandshurica</i> W.Becker 제비꽃 P0208	O	O		
<i>Viola patrinii</i> DC. ex Ging. 흰제비꽃	O			
<i>Viola phalacrocarpa</i> Maxim. 털제비꽃	O			
<i>Viola phalacrocarpa</i> f. <i>glaberrima</i> (W.Becker) F.Maek. ex H.Hara 민둥제비꽃	O			
<i>Viola rossii</i> Hemsl. 고깔제비꽃	O			
<i>Viola selkirkii</i> Pursh ex Goldie 뫼제비꽃 P125077	O	O		
<i>Viola seoulensis</i> Nakai 서울제비꽃 KHB1041730		O		
<i>Viola takesimana</i> Nakai 섬제비꽃 KHB1041731	O	O		
<i>Viola tokubuchiana</i> var. <i>takedana</i> (Makino) F.Maek. 민둥뫼제비꽃	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Viola variegata</i> Fisch. ex Link 알록제비꽃	O			
<i>Viola verecunda</i> A.Gray 콩제비꽃 P120897	O	O		
<i>Viola woosanensis</i> Y.N.Lee & J.Kim 우산제비꽃 P123328	O	O		
Tamaricaceae 위성류과				
<i>Tamarix chinensis</i> Lour. 위성류 KHB1041739	O	O		
Elatinaceae 물별과				
<i>Elatine triandra</i> var. <i>pedicellata</i> Krylov 물별	O			
Cucurbitaceae 박과				
<i>Citrullus vulgaris</i> Schrad. 수박	O			
<i>Cucumis melo</i> var. <i>makuwa</i> Makino 참외 P122779		O	O	
<i>Cucumis sativus</i> L. 오이	O			
<i>Cucurbita moschata</i> Duchesne ex Poir 호박	O			
<i>Gynostemma pentaphyllum</i> (Thunb.) Makino 돌외 P122903	O	O	O	O
<i>Lagenaria leucantha</i> Rusby 박	O			
Lythraceae 부처꽃과				
<i>Lythrum anceps</i> (Koehne) Makino 부처꽃 P122604	O	O		
<i>Lythrum salicaria</i> L. 털부처꽃 P121974	O	O		
<i>Rotala indica</i> (Willd.) Koehne 마디꽃 P121937	O	O		
Onagraceae 바늘꽃과				
<i>Circaea alpina</i> L. 쥐털이슬	O			
<i>Circaea cordata</i> Royle 쇠털이슬 P121628	O	O		
<i>Circaea mollis</i> Slebold & Zucc. 털이슬 P122898	O	O		
<i>Circaea quadrisulcata</i> (Maxim.) Franch. & Sav. 말털이슬 P122990	O	O		
<i>Epilobium angustifolium</i> L. 분홍바늘꽃	O			
<i>Epilobium cephalostigma</i> Hausskn. 돌바늘꽃 KHB1041777	O	O		
<i>Epilobium hirsutum</i> L. 큰바늘꽃 P123039	O	O		
<i>Epilobium pyrricholophum</i> Franch. & Sav. 바늘꽃 P0082	O	O		
<i>Ludwigia prostrata</i> Roxb. 여뀌바늘	O			
<i>Oenothera biennis</i> L. 달맞이꽃 P0120	O	O		
Alangiaceae 박쥐나무과				
<i>Alangium platanifolium</i> var. <i>trilobum</i> (Miq.) Ohwi 박쥐나무 P125217	O	O		
Cornaceae 층층나무과				
<i>Aucuba japonica</i> Thunb. 식나무 P121624	O	O		
<i>Cornus controversa</i> Hemsl. ex Prain 층층나무 P123241	O	O		
<i>Cornus macrophylla</i> Wall. 곰의말채나무 P121602	O	O		
<i>Cornus walteri</i> F.T.Wangerin 말채나무 P121729	O	O		
Araliaceae 두릅나무과				
<i>Aralia cordata</i> Thunb. 땅두릅	O			
<i>Aralia cordata</i> var. <i>continentalis</i> (Kitag.) Y.C.Chu 독활 P0093	O	O	O	
<i>Aralia elata</i> (Miq.) Seem. 두릅나무 KHB1041804	O	O		
<i>Fatsia japonica</i> (Thunb.) Decne. & Planch. 팔손이나무 KHB1256613	O	O		
<i>Hedera rhombea</i> (Miq.) Bean 송악 P120055	O	O	O	O
<i>Kalopanax septemlobus</i> (Thunb.) Koidz. 음나무 P120364	O	O		
<i>Kalopanax septemlobus</i> var. <i>maximowiczii</i> (V.Houtte) Hand.-Mazz. 가는잎음나무	O			
Umbelliferae 산형과				
<i>Aegopodium alpestre</i> Ledeb. 왜방풍	O			
<i>Angelica acutiloba</i> (Siebold & Zucc.) Kitag. 왜당귀 KHB1041859		O		
<i>Angelica decursiva</i> (Miq.) Franch. & Sav. 바다나물	O			
<i>Angelica polymorpha</i> Maxim. 궁궁이	O			
<i>Anthriscus caucalis</i> M.Bieb. 유럽전호 P120690	O	O		
<i>Anthriscus sylvestris</i> (L.) Hoffm. 전호 P120206	O	O		
<i>Bupleurum falcatum</i> L. 시호	O			
<i>Bupleurum latissimum</i> Nakai 섬시호 P121979	O	O		
<i>Centella asiatica</i> (L.) Urb. 병풀 KHB1041837		O		
<i>Cnidium japonicum</i> Miq. 갯사상자	O			
<i>Cnidium monnieri</i> (L.) Cusson 벌사상자	O			
<i>Cnidium officinale</i> Makino 천궁	O			
<i>Cryptotaenia japonica</i> Hassk. 파드득나물 P122980	O	O		O
<i>Cymopterus melanotilingia</i> (H.Boissieu) C.Y.Yoon 큰참나물	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Daucus littoralis</i> var. <i>koreana</i> Nakai 갯당근	O			
<i>Dystaenia takesimana</i> (Nakai) Kitag. 섬바디 P121780	O	O	O	O
<i>Foeniculum vulgare</i> Gaertn. 회향 P121917	O	O		
<i>Hydrocotyle maritima</i> Honda 선피막이 P122161	O	O		
<i>Oenanthe javanica</i> (Blume) DC. 미나리 KHB1041862	O	O		
<i>Oenanthe javanica</i> var. <i>japonica</i> (Maxim.) Honda 개미나리	O			
<i>Osmorhiza aristata</i> (Thunb.) Makino & Yabe 긴사상자 P121679	O	O		
<i>Ostericum grosseserratum</i> (Maxim.) Kitag. 신감채 P0073		O		
<i>Ostericum sieboldii</i> (Miq.) Nakai 뿔미나리	O			
<i>Peucedanum japonicum</i> Thunb. 갯기름나물 P121986	O	O		O
<i>Peucedanum terebinthaceum</i> (Fisch.) Fisch. ex DC. 기름나물	O			
<i>Pimpinella brachycarpa</i> (Kom.) Nakai 참나물 P125124	O	O		
<i>Sanicula chinensis</i> Bunge 참반디 P121767	O	O		
<i>Sanicula rubriflora</i> F.Schmidt ex Maxim. 붉은참반디	O			
<i>Torilis japonica</i> (Houtt.) DC. 사상자 P0264	O	O		
<i>Torilis scabra</i> (Thunb.) DC. 개사상자 P121719	O	O		
Pyrolaceae 노루발과				
<i>Chimaphila japonica</i> Miq. 매화노루발 P121451	O	O		
<i>Monotropa hypopithys</i> L. 구상난풀	O			
<i>Monotropa uniflora</i> L. 수정난풀 P123340	O	O		
<i>Pyrola japonica</i> Klenze ex Alef. 노루발 P121716	O	O		
<i>Pyrola minor</i> L. 주걱노루발	O			
<i>Pyrola renifolia</i> Maxim. 콩팥노루발 P123370	O	O		
Ericaceae 진달래과				
<i>Rhododendron brachycarpum</i> D.Don ex G.Don 만병초 P123224	O	O		
<i>Rhododendron brachycarpum</i> var. <i>roseum</i> Koidz. 홍만병초	O			
<i>Rhododendron mucronulatum</i> Turcz. 진달래	O			
<i>Rhododendron schlippenbachii</i> Maxim. 철쭉	O			
<i>Rhododendron yedoense</i> f. <i>poukhanense</i> (H.Lév.) Sugim. 산철쭉	O			
Myrsinaceae 자금우과				
<i>Ardisia japonica</i> (Thunb.) Blume 자금우 P121852	O	O		
<i>Ardisia pusilla</i> A.DC. 산호수	O			
Primulaceae 앵초과				
<i>Anagallis arvensis</i> L. 뚜껑별꽃	O			
<i>Androsace cortusaefolia</i> Nakai 금강봄맞이	O			
<i>Androsace umbellata</i> (Lour.) Merr. 봄맞이 P120850		O		
<i>Lysimachia barystachys</i> Bunge 까치수염	O			
<i>Lysimachia japonica</i> Thunb. 쯤가지풀 KHB1254128	O	O		
<i>Lysimachia mauritiana</i> Lam. 갯까치수염 P121139	O	O	O	O
<i>Primula modesta</i> var. <i>fauriae</i> (Franch.) Takeda 설앵초	O			
<i>Primula sieboldii</i> E.Morren 앵초	O			
Ebenaceae 감나무과				
<i>Diospyros kaki</i> Thunb. 감나무 KHB1050441	O	O		
<i>Diospyros lotus</i> L. 고욤나무 P126154	O	O		
Styracaceae 떼죽나무과				
<i>Styrax japonicus</i> Siebold & Zucc. 떼죽나무	O			
<i>Styrax obassia</i> Siebold & Zucc. 쪽동백나무 P125225	O	O		
Symplocaceae 노린재나무과				
<i>Symplocos chinensis</i> f. <i>pilosa</i> (Nakai) Ohwi 노린재나무 P122485	O	O		
Oleaceae 물푸레나무과				
<i>Forsythia koreana</i> (Rehder) Nakai 개나리 P120071	O	O		
<i>Forsythia ovata</i> Nakai 만리화	O			
<i>Fraxinus mandshurica</i> Rupr. 들메나무	O			
<i>Fraxinus rhynchophylla</i> Hance 물푸레나무	O			
<i>Ligustrum acutissimum</i> Koehne 산둥취뽕나무	O			
<i>Ligustrum foliosum</i> Nakai 섬취뽕나무 P121584	O	O		
<i>Ligustrum foliosum</i> f. <i>ovale</i> Nakai 둥근잎섬취뽕나무	O			
<i>Ligustrum japonicum</i> Thunb. 광나무	O			
<i>Ligustrum obtusifolium</i> Siebold & Zucc. 취뽕나무 P122180	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Ligustrum ovalifolium</i> Hassk. 왕취뽕나무	O			
<i>Syringa patula</i> var. <i>venosa</i> (Nakai) K.Kim 섬개회나무 P121580	O	O		
Gentianaceae 용담과				
<i>Gentiana squarrosa</i> Ledeb. 구슬봉이	O			
<i>Gentiana zollingeri</i> Faw. 큰구슬봉이 P125627	O	O		
<i>Tripterospermum japonicum</i> (Siebold & Zucc.) Maxim. 덩굴용담 P123317	O	O		
Apocynaceae 협죽도과				
<i>Trachelospermum asiaticum</i> (Siebold & Zucc.) Nakai 마삭줄	O			
Asclepiadaceae 박주가리과				
<i>Cynanchum atratum</i> Bunge 백미꽃	O			
<i>Cynanchum nipponicum</i> Matsum. 덩굴박주가리	O			
<i>Cynanchum nipponicum</i> var. <i>glabrum</i> (Nakai) H.Hara 흑박주가리	O			
<i>Cynanchum wilfordii</i> (Maxim.) Hemsl. 큰조롱 P123176	O	O		O
<i>Metaplexis japonica</i> (Thunb.) Makino 박주가리 P0169	O	O		O
<i>Tylophora floribunda</i> Miq. 왜박주가리	O			
Rubiaceae 꼭두서니과				
<i>Asperula odorata</i> L. 선갈퀴 P121766	O	O		
<i>Damnacanthus indicus</i> C.F.Gaertn. 호자나무	O			
<i>Galium dahuricum</i> Turcz. 큰잎갈퀴 KHB1253470		O		
<i>Galium linearifolium</i> Turcz. 실갈퀴	O			
<i>Galium pogonanthum</i> Franch. & Sav. 산갈퀴	O			
<i>Galium spurium</i> var. <i>echinospermum</i> (Wallr.) Hayek 갈퀴덩굴 P120176-1	O	O	O	
<i>Galium trifloriforme</i> Kom. 개선갈퀴 P125139	O	O		
<i>Galium verum</i> var. <i>asiaticum</i> Nakai 솔나물	O			
<i>Mitchella undulata</i> Siebold & Zucc. 호자덩굴 P120391	O	O		
<i>Paederia scandens</i> (Lour.) Merr. 계요등 P120033	O	O		
<i>Paederia scandens</i> var. <i>angustifolia</i> (Nakai) T.B.Lee 좁은잎계요등	O			
<i>Rubia akane</i> Nakai 꼭두서니 P0159	O	O		
<i>Rubia cordifolia</i> var. <i>pratensis</i> Maxim. 갈퀴꼭두서니 P123872	O	O		
Convolvulaceae 메꽃과				
<i>Calystegia hederacea</i> Wall. 애기메꽃 P120867	O	O		
<i>Calystegia sepium</i> (L.) R.Br. 큰메꽃	O			
<i>Calystegia sepium</i> var. <i>japonicum</i> (Choisy) Makino 메꽃 P0052	O	O		
<i>Calystegia soldanella</i> (L.) Roem. & Schultb. 갯메꽃 P121226	O	O		O
<i>Convolvulus arvensis</i> L. 서양메꽃 P121998	O	O		
<i>Cuscuta australis</i> R.Br. 실새삼	O			
<i>Cuscuta japonica</i> Choisy 새삼 P122934	O	O		
<i>Cuscuta pentagona</i> Engelm. 미국실새삼	O			
<i>Ipomoea batatas</i> (L.) Lam. 고구마	O			
<i>Ipomoea hederacea</i> var. <i>integriscula</i> A.Gray 둥근잎미국나팔꽃 P123488		O		
<i>Ipomoea purpurea</i> Roth 둥근잎나팔꽃 P121635	O	O		
<i>Pharbitis nil</i> (L.) Choisy 나팔꽃	O			
Boraginaceae 지치과				
<i>Argusia sibirica</i> (L.) Dandy 모래지치 KHB1258051	O	O		
<i>Lithospermum arvense</i> L. 개지치	O			
<i>Symphytum officinale</i> L. 컴프리 P121310	O	O		
<i>Trigonotis peduncularis</i> (Trevir.) Benth. ex Hemsl. 꽃마리 P120005	O	O		
<i>Trigonotis radicans</i> var. <i>sericea</i> (Maxim.) H.Hara 참꽃마리	O			
Verbenaceae 마편초과				
<i>Callicarpa dichotoma</i> (Lour.) K.Koch 좀작살나무	O			
<i>Callicarpa japonica</i> Thunb. 작살나무 P121755	O	O		
<i>Callicarpa japonica</i> var. <i>luxurians</i> Rehder 왕작살나무 P121622	O	O		
<i>Callicarpa japonica</i> var. <i>taquetii</i> (L.f.) Nakai 송금나무	O			
<i>Callicarpa mollis</i> Siebold & Zucc. 새비나무	O			
<i>Clerodendrum trichotomum</i> Thunb. 누리장나무 P123253	O	O		
<i>Verbena officinalis</i> L. 마편초	O			
<i>Vitex rotundifolia</i> L.f. 순비기나무	O			
Labiatae 꿀풀과				
<i>Agastache rugosa</i> (Fisch. & Mey.) Kuntze 배초향 P0089	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Ajuga decumbens</i> Thunb. 금창초 P121751	O	O		
<i>Amethystea caerulea</i> L. 개차즈기 P0038	O	O		
<i>Clinopodium chinense</i> var. <i>glabrescens</i> (Nakai) Ohwi 푸른산층층이	O			
<i>Clinopodium chinense</i> var. <i>parviflorum</i> (Kudô) H.Hara 층층이꽃 P121630	O	O		
<i>Clinopodium chinense</i> var. <i>shibetschense</i> (H.Lév.) Koidz. 산층층이	O			
<i>Clinopodium gracile</i> (Benth.) Kuntze 애기탑꽃 P122952	O	O		
<i>Clinopodium gracile</i> var. <i>multicaule</i> (Maxim.) Ohwi 탑꽃 P121858	O	O		
<i>Clinopodium micranthum</i> (Regel) H.Hara 두메층층이 P0088	O	O		
<i>Clinopodium sachalinense</i> (F.Schmidt) Koidz. 두메탑풀	O			
<i>Dracocephalum argunense</i> Fisch. ex Link 용머리	O			
<i>Elsholtzia ciliata</i> (Thunb.) Hyl. 향유 P0016	O	O		
<i>Glechoma grandis</i> (A.Gray) Kuprian. 긴병꽃풀 P120205		O		
<i>Isodon excisus</i> (Maxim.) Kudô 오리방풀	O			
<i>Isodon inflexus</i> (Thunb.) Kudô 산박하 P0072	O	O		
<i>Isodon japonicus</i> (Burm.f.) H.Hara 방아풀	O			
<i>Isodon serra</i> (Maxim.) Kudô 자주방아풀	O			
<i>Lamium album</i> var. <i>barbatum</i> (Siebold & Zucc.) Franch. & Sav. 광대수염	O			
<i>Lamium amplexicaule</i> L. 광대나물 P120013	O	O		
<i>Lamium takesimense</i> Nakai 섬광대수염 P121651	O	O	O	
<i>Leonurus japonicus</i> Houtt. 익모초 P122579	O	O	O	O
<i>Lycopus lucidus</i> Turcz. 썩싸리	O			
<i>Mentha arvensis</i> var. <i>piperasces</i> Malinv. ex Holmes 박하 P0025	O	O		
<i>Mentha arvensis</i> var. <i>barbata</i> (Nakai) W.T.Lee 털박하	O			
<i>Mosla japonica</i> (Benth.) Maxim. 산들깨	O			
<i>Mosla punctulata</i> (J.F.Gmel.) Nakai 들깨풀 P0022	O	O		
<i>Nepeta cataria</i> L. 개박하 KHB1042159	O	O		
<i>Perilla frutescens</i> var. <i>japonica</i> (Hassk.) H.Hara 들깨 KHB1042168	O	O		
<i>Schizonepeta tenuifolia</i> var. <i>japonica</i> (Maxim.) Kitag. 형개 KHB1042181		O		
<i>Scutellaria baicalensis</i> Georgi 황금 KHB1042183	O	O		
<i>Scutellaria strigillosa</i> Hemsl. 참굴무꽃	O			
<i>Stachys japonica</i> Miq. 석잠풀 P122714	O	O		
<i>Teucrium japonicum</i> Houtt. 개곽향 KHB1042198	O	O		
<i>Teucrium viscidum</i> var. <i>miquelianum</i> (Maxim.) H.Hara 덩굴곽향 P123361	O	O		
<i>Thymus quinquecostatus</i> Celak. 백리향	O			
<i>Thymus quinquecostatus</i> var. <i>japonica</i> H.Hara 섬백리향 P121672	O	O		O
Solanaceae 가지과				
<i>Capsicum annuum</i> L. 고추	O			
<i>Datura stramonium</i> var. <i>chalybea</i> Koch. 독말풀	O			
<i>Lycium chinense</i> Mill. 구기자나무 P123078	O	O		
<i>Physalis alkekengi</i> var. <i>francheti</i> (Mast.) Hort. 파리 P122654	O	O		
<i>Physalis angulata</i> L. 땅파리	O			
<i>Solanum lyratum</i> Thunb. 배풍동 P122081	O	O	O	O
<i>Solanum melongena</i> L. 가지	O			
<i>Solanum nigrum</i> L. 까마중 P0020	O	O	O	O
<i>Solanum tuberosum</i> L. 감자	O			
Scrophulariaceae 현삼과				
<i>Lindernia micrantha</i> D.Don 논뚝외풀	O			
<i>Lindernia procumbens</i> (Krock.) Borbá 발뚝외풀	O			
<i>Mazus pumilus</i> (Burm.f.) Steenis 주름잎 P0005	O	O		
<i>Melampyrum roseum</i> Maxim. 꽃머느리밥풀 P122186		O		
<i>Mimulus nepalensis</i> Benth. 물파리아재비	O			
<i>Paulownia coreana</i> Uyeki 오동나무	O			
<i>Paulownia tomentosa</i> (Thunb.) Steud. 참오동나무 KHB1272016	O	O		
<i>Pedicularis grandiflora</i> Fisch. 큰송이풀	O			
<i>Phtheirospermum japonicum</i> (Thunb.) Kanitz 나도송이풀 P0063	O	O		
<i>Scrophularia grayana</i> Maxim. ex Kom. 개현삼	O			
<i>Scrophularia kakudensis</i> Franch. 큰개현삼	O			
<i>Scrophularia koraiensis</i> Nakai 토현삼	O			
<i>Scrophularia takesimensis</i> Nakai 섬현삼 P121943	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Veronica anagallis-saqualica</i> L. 큰물칭개나물 P121314	O	O		
<i>Veronica arvensis</i> L. 선개불알풀 P120432	O	O		
<i>Veronica didyma</i> var. <i>lilacina</i> (H.Hara) T.Yamaz. 개불알풀 P120081	O	O		
<i>Veronica insularis</i> Nakai 섬꼬리풀 P121655	O	O		
<i>Veronica persica</i> Poir. 큰개불알풀 P120002	O	O		
<i>Veronica undulata</i> Wall. 물칭개나물 P121244	O	O		
Orobanchaceae 열당과				
<i>Lathraea japonica</i> Miq. 개중용 KHB1256417	O	O		
<i>Orobanche coerulescens</i> Stephan 초중용 P123095	O	O		
<i>Phacellanthus tubiflorus</i> Siebold & Zucc. 가지더부살이 P121723	O	O		
Phrymaceae 파리풀과				
<i>Phryma leptostachya</i> var. <i>asiatica</i> H.Hara 파리풀 P121825	O	O		O
Plantaginaceae 질경이과				
<i>Plantago asiatica</i> L. 질경이 P120873	O	O		O
<i>Plantago camtschatica</i> Cham. ex Link 개질경이	O			
<i>Plantago depressa</i> Willd. 털질경이	O			
<i>Plantago major</i> f. <i>yezomaritima</i> (Koidz.) Ohwi 갯질경이	O			
<i>Plantago major</i> var. <i>japonica</i> (Franch. & Sav.) Miyabe 왕질경이 KHB1259349	O	O		
Caprifoliaceae 인동과				
<i>Abelia coreana</i> var. <i>insularis</i> (Nakai) W.T.Lee & W.K.Paik 섬냉간나무 P122022	O	O		
<i>Lonicera insularis</i> Nakai 섬괴불나무 P121608	O	O	O	O
<i>Lonicera japonica</i> Thunb. 인동 P122716	O	O		
<i>Sambucus sieboldiana</i> var. <i>miquelii</i> (Nakai) H.Hara 지령쿠나무 KHB1268175	O	O		
<i>Sambucus sieboldiana</i> var. <i>pendula</i> (Nakai) T.B.Lee 말오춤나무 P121585	O	O	O	O
<i>Sambucus williamsii</i> var. <i>coreana</i> (Nakai) Nakai 딱총나무	O			
<i>Viburnum carlesii</i> Hemsl. 분꽃나무 P120211	O	O		
<i>Viburnum dilatatum</i> Thunb. 가막살나무	O			
<i>Viburnum furcatum</i> Blume 분단나무 P122925	O	O		
<i>Viburnum wrightii</i> Miq. 산가막살나무 P121662	O	O		
Valerianaceae 마타리과				
<i>Patrinia scabiosaeifolia</i> Fisch. ex Trevir. 마타리	O			
<i>Valeriana dageletiana</i> Nakai ex F.Maek. 넓은잎취오줌풀 P121773	O	O		
<i>Valeriana dageletiana</i> var. <i>integra</i> (Nakai) Nakai ex F.Maek. 긴잎취오줌풀	O	O		
<i>Valeriana dageletiana</i> var. <i>verticillata</i> S.H.Park 세잎취오줌풀		O		
<i>Valeriana fauriei</i> Briq. 쥐오줌풀	O			
Campanulaceae 초롱꽃과				
<i>Adenophora erecta</i> S.T.Lee, J.G.Lee & S.T.Kim 선모시대 KHB1052430	O	O		
<i>Adenophora remotiflora</i> (Siebold & Zucc.) Miq. 모시대	O			
<i>Campanula takesimana</i> Nakai 섬초롱꽃 P121742	O	O	O	O
<i>Codonopsis lanceolata</i> (Siebold & Zucc.) Trautv. 더덕 P125098	O	O		
<i>Platycodon grandiflorum</i> (Jacq.) A.DC. 도라지 P122454	O	O		
Compositae 국화과				
<i>Adenocaulon himalaicum</i> Edgew. 털가치 P0265	O	O		
<i>Ainsliaea acerifolia</i> Sch.Bip. 단풍취 P0156		O		
<i>Ambrosia artemisiifolia</i> L. 돼지풀 P0041	O	O		
<i>Arctium lappa</i> L. 우엉 P122052	O	O		
<i>Artemisia apiacea</i> Hance ex Walp. 개사철쭉	O			
<i>Artemisia capillaris</i> Thunb. 사철쭉 P124056	O	O		
<i>Artemisia dubia</i> Wall. 참쭉	O			
<i>Artemisia japonica</i> Thunb. 제비쭉 P123412	O	O		
<i>Artemisia japonica</i> subsp. <i>littoricola</i> Kitam. 갯제비쭉 P121665	O	O	O	O
<i>Artemisia japonica</i> var. <i>angustissima</i> (Nakai) Kitam. 실제비쭉	O			
<i>Artemisia japonica</i> var. <i>hallaisanensis</i> (Nakai) Kitam. 섬쭉	O			
<i>Artemisia keiskeana</i> Miq. 맑은대쭉 P0084	O	O		
<i>Artemisia montana</i> (Nakai) Pamp. 산쭉 P122879	O	O	O	O
<i>Artemisia princeps</i> Pamp. 쭉 P0046	O	O		
<i>Artemisia scoparia</i> Waldst. & Kit. 비쭉	O			
<i>Artemisia stolonifera</i> (Maxim.) Kom. 넓은잎외쭉	O			
<i>Artemisia sylvatica</i> Maxim. 그늘쭉	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Aster ageratoides</i> Turcz. 가실쑥부쟁이	O			
<i>Aster arenarius</i> (Kitam.) Nemoto 섬갯쑥부쟁이	O			
<i>Aster glehni</i> F.Schmidt 섬쑥부쟁이 P122888	O	O	O	O
<i>Aster hispidus</i> Thunb. 갯쑥부쟁이	O			
<i>Aster incisus</i> Fisch. 가새쑥부쟁이	O			
<i>Aster koraiensis</i> Nakai 벌개미취	O			
<i>Aster meendorffii</i> (Regel & Maack) Voss 개쑥부쟁이	O			
<i>Aster oharai</i> Nakai 왕해국	O			
<i>Aster scaber</i> Thunb. 참취 P0070	O	O		
<i>Aster sphathulifolius</i> Maxim. 해국 P123105	O	O	O	O
<i>Aster subulatus</i> Michx. 비짜루국화	O			
<i>Aster tataricus</i> L.f. 개미취	O			
<i>Bidens bipinnata</i> L. 도깨비바늘 P122219	O	O		
<i>Bidens biternata</i> (Lour.) Merr. & Sherff ex Sherff 털도깨비바늘 P122819	O	O		
<i>Bidens frondosa</i> L. 미국가막사리 P0015	O	O		
<i>Bidens pilosa</i> L. 울산도깨비바늘 P123511	O	O		
<i>Bidens tripartita</i> L. 가막사리	O			
<i>Brexa segeta</i> (Willd.) Kitam. 조뱅이 P122195	O	O		
<i>Carduus crispus</i> L. 지느러미엉겅퀴 P0219	O	O		
<i>Carpesium abrotanoides</i> L. 담배풀 P122877	O	O		O
<i>Carpesium cernuum</i> L. 좀담배풀 P123591	O	O		
<i>Carpesium divaricatum</i> Siebold & Zucc. 긴담배풀 P122465	O	O		
<i>Carpesium rosulatum</i> Miq. 애기담배풀	O			
<i>Carpesium triste</i> Maxim. 두메담배풀 P0081	O	O		
<i>Centaurea cyanus</i> L. 수레국화	O			
<i>Centipeda minima</i> (L.) A.Br. & Asch. 중대加里풀	O			
<i>Cirsium japonicum</i> f. <i>nakaianum</i> (H.Lév. & Vaniot) W.T.Lee 좁은잎엉겅퀴	O			
<i>Cirsium japonicum</i> var. <i>spinosissimum</i> Kitam. 가시엉겅퀴	O			
<i>Cirsium nipponicum</i> (Maxim.) Makino 물엉겅퀴 P122889	O	O		O
<i>Cirsium pendulum</i> Fisch. ex DC. 큰엉겅퀴	O			
<i>Conyza bonariensis</i> (L.) Cronquist 실향초	O			
<i>Conyza canadensis</i> (L.) Cronquist 망초 P0210	O	O		O
<i>Conyza sumatrensis</i> E.Walker 큰망초 P122514	O	O		O
<i>Coreopsis lanceolata</i> L. 큰금계국	O			
<i>Cosmos bipinnatus</i> Cav. 코스모스	O			
<i>Crassocephalum crepidioides</i> (Benth.) S.Moore 주홍서나물 P124140		O		
<i>Crepidiastrum chelidoniifolium</i> (Makino) J.H.Pak & Kawano 까치고들빼기	O			
<i>Crepidiastrum denticulatum</i> (Houtt.) J.H.Pak & Kawano 이고들빼기 P0205	O	O		
<i>Crepidiastrum lanceolatum</i> (Houtt.) Nakai 갯고들빼기	O			
<i>Crepidiastrum sonchifolium</i> (Bunge) Pak & Kawano 고들빼기	O			
<i>Dendranthema boreale</i> (Makino) Ling ex Kitam. 산국	O			
<i>Dendranthema zawadskii</i> var. <i>lucidum</i> (Nakai) J.H.Park 울릉국화 KNKA200406071012	O	O		
<i>Dendranthema makinoi</i> (Matsum.) Y.N.Lee 마키노국화 KHB1253968		O		
<i>Dendranthema zawadskii</i> var. <i>latilobum</i> (Maxim.) Kitag. 구절초	O			
<i>Eclipta prostrata</i> (L.) L. 한련초	O			
<i>Erechtites hieracifolia</i> Raf. 붉은서나물 P122908		O		
<i>Erigeron annuus</i> (L.) Pers. 개망초 P0071	O	O	O	O
<i>Eupatorium japonicum</i> Thunb. 등골나물 P0065	O	O		
<i>Eupatorium makinoi</i> var. <i>oppositifolium</i> (Koidz.) Kawahara & Yahara 별등골나물 P122071		O		
<i>Farfugium japonicum</i> (L.) Kitam. 털머위 KHB1269646	O	O		O
<i>Galinsoga ciliata</i> (Raf.) S.F.Blake 털별꽃아재비 P0001	O	O		
<i>Galinsoga parviflora</i> Cav. 별꽃아재비	O			
<i>Gnaphalium affine</i> D.Don 떡쑥 P120673	O	O		
<i>Gnaphalium japonicum</i> Thunb. 풀쑥나물 P120518	O	O		O
<i>Helianthus tuberosus</i> L. 뚱판지 P122906	O	O		
<i>Hemistepta lyrata</i> Bunge 지칭개	O			
<i>Hieracium umbellatum</i> L. 조밥나물 P122068	O	O		
<i>Hololeion maximowiczii</i> Kitam. 깨묵	O			
<i>Hypochoeris ciliata</i> (Thunb.) Makino 금혼초	O			

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Hypochaeris radicata</i> L. 서양금혼초 P121116	O	O		
<i>Inula britannica</i> var. <i>japonica</i> (Thunb.) Franch. & Sav. 금불초 P122674	O	O		
<i>Inula britannica</i> var. <i>linariifolia</i> (Turcz.) Regel 가는금불초	O			
<i>Ixeridium dentatum</i> (Thunb. ex Mori) Tzvelev 썸바귀	O			
<i>Ixeris chinensis</i> (Thunb.) Nakai 노랑선썸바귀 P120871	O	O		
<i>Ixeris debilis</i> (Thunb.) A.Gray 벌음썸바귀 P122387	O	O		
<i>Ixeris polycephala</i> Cass. 벌썸바귀	O			
<i>Ixeris stolonifera</i> A.Gray 썸썸바귀 P120863	O	O		
<i>Ixeris strigosa</i> (H.Lév. & Vaniot) J.H.Pak & Kawano 선썸바귀 P120187	O	O		
<i>Lactuca indica</i> f. <i>indivisa</i> (Makino) H.Hara 가는잎왕고들빼기 P123038	O	O		O
<i>Lactuca indica</i> L. 왕고들빼기 P0078	O	O	O	O
<i>Lactuca raddeana</i> Maxim. 산썸바귀	O			
<i>Lactuca sativa</i> L. 상추	O			
<i>Lactuca scariola</i> L. 가시상추 P122832	O	O		
<i>Lactuca triangulata</i> Maxim. 두메고들빼기 P123228	O	O		
<i>Lapsana communis</i> L. 서양개보리쟁이 P121772	O	O		
<i>Lapsanastrum apogonoides</i> (Maxim.) J.H.Pak & K.Bremer 개보리쟁이 KHB1276428		O		
<i>Leibnitzia anandria</i> (L.) Turcz. 솜나물	O			
<i>Parasenecio adenostyloides</i> (Franch. & Sav. ex Maxim.) H.Koyama 계박취나물	O			
<i>Parasenecio auriculatus</i> var. <i>matsumuranus</i> Nakai 박취나물	O			
<i>Petasites japonicus</i> (Siebold & Zucc.) Maxim. 머위 P120043	O	O		
<i>Picris hieracioides</i> var. <i>koreana</i> Kitam. 쇠서나물 P0092	O	O		
<i>Rhaponticum uniflorum</i> (L.) DC. 뽕꼭채 KHB1274508	O	O		
<i>Rudbeckia laciniata</i> L. 삼잎국화	O			
<i>Saussurea conandriifolia</i> Nakai 담배취	O			
<i>Saussurea diamantica</i> Nakai 금강분취	O			
<i>Saussurea grandicapitula</i> W.Lee et H.T.Im 태백취		O		
<i>Saussurea grandifolia</i> Maxim. 서덜취 KHB1253809	O	O		
<i>Saussurea macrolepis</i> (Nakai) Kitam. 각시서덜취 KHB1253956	O	O		
<i>Saussurea tanakae</i> Franch. & Sav. ex Maxim. 당분취 P123238	O	O		
<i>Senecio vulgaris</i> L. 개쑥갓 P0040	O	O		
<i>Sigesbeckia glabrescens</i> Makino 진득찰 P0010	O	O		
<i>Sigesbeckia pubescens</i> Makino 털진득찰 P0112	O	O		O
<i>Solidago virgaurea</i> subsp. <i>asiatica</i> Kitam. ex H.Hara 미역취	O			
<i>Solidago virgaurea</i> subsp. <i>gigantea</i> (Nakai) Kitam. 울릉미역취 P122967	O	O		O
<i>Sonchus asper</i> (L.) Hill 큰방가지뚥 P120195	O	O	O	O
<i>Sonchus brachyotus</i> DC. 사데풀 P122563	O	O		O
<i>Sonchus oleraceus</i> L. 방가지뚥 P120585	O	O		O
<i>Syneilesis palmata</i> (Thunb.) Maxim. 우산나물	O			
<i>Synurus deltooides</i> (Aiton) Nakai 수리취 P126213	O	O		
<i>Synurus excelsus</i> (Makino) Kitam. 큰수리취	O			
<i>Tagetes minuta</i> L. 만수국아재비 P124403	O	O		
<i>Taraxacum coreanum</i> Nakai 흰민들레	O			
<i>Taraxacum officinale</i> Weber 서양민들레 P0097	O	O		
<i>Taraxacum ohwianum</i> Kitam. 산민들레 KHB1274247	O	O		
<i>Taraxacum platycarpum</i> Dahlst. 민들레 P120354	O	O		
<i>Xanthium canadense</i> Mill. 큰도꼬마리	O			
<i>Xanthium strumarium</i> L. 도꼬마리 P124030	O	O		
<i>Youngia japonica</i> (L.) DC. 뽕리쟁이 P120197	O	O		
Alismataceae 택사과				
<i>Alisma canaliculatum</i> A.Br. & Bouché 택사	O			
<i>Alisma orientale</i> (Sam.) Juz. 질경이택사	O			
Liliaceae 백합과				
<i>Allium cepa</i> L. 양파	O			
<i>Allium fistulosum</i> L. 파	O			
<i>Allium macrostemon</i> Bunge 산달래 P120344	O	O	O	
<i>Allium microdictyon</i> Prokh. 산마늘	O			
<i>Allium monanthum</i> Maxim. 달래	O			
<i>Allium ochotense</i> Prokh. 울릉산마늘 P121954	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Allium sacculiferum</i> Maxim. 참 산부추	O			
<i>Allium scorodoprasum</i> var. <i>viviparum</i> Regel 마늘	O			
<i>Allium senescens</i> L. 두메부추 KHB1287058	O	O		
<i>Allium thunbergii</i> G.Don 산부추	O			
<i>Allium tuberosum</i> Rottler ex Spreng. 부추 P123454	O	O		
<i>Asparagus cochinchinensis</i> (Lour.) Merr. 천문동	O			
<i>Asparagus officinalis</i> L. 아스파라거스	O			
<i>Disporum sessile</i> D.Don 윤판나물아재비 P121583	O	O		
<i>Disporum smilacinum</i> A.Gray 애기나리	O			
<i>Disporum uniflorum</i> Baker 윤판나물	O			
<i>Disporum viridescens</i> (Maxim.) Nakai 큰애기나리 P121058	O	O		
<i>Gagea hiensis</i> Pascher 애기중의무릇 P121934		O		
<i>Hemerocallis fulva</i> (L.) L. 원추리 P122255	O	O		
<i>Hemerocallis fulva</i> f. <i>kwanso</i> (Regel) Kitam. 왕원추리	O			
<i>Hemerocallis minor</i> Mill. 애기원추리	O			
<i>Lilium callosum</i> Siebold & Zucc. 땅나리	O			
<i>Lilium hansonii</i> Leichtlin ex Baker 섬말나리 P121661	O	O		
<i>Lilium lancifolium</i> Thunb. 참나리 P122073	O	O	O	O
<i>Lilium leichlinii</i> var. <i>maximowiczii</i> (Regel) Baker 중나리	O			
<i>Liriope platyphylla</i> F.T.Wang & T.Tang 맥문동 P122162	O	O		O
<i>Maianthemum bifolium</i> (L.) F.W.Schmidt 두루미꽃	O			
<i>Maianthemum dilatatum</i> (Wood) A.Nelson & J.F.Macbr. 큰두루미꽃 P121654	O	O		
<i>Ophiopogon japonicus</i> (L.f.) Ker Gawl. 소엽맥문동 P120017	O	O		
<i>Polygonatum falcatum</i> A.Gray 진황정	O			
<i>Polygonatum odoratum</i> var. <i>pluriflorum</i> (Miq.) Ohwi 등굴레 P120182	O	O		
<i>Polygonatum robustum</i> (Korsch.) Nakai 왕등굴레 KNKA200407292092	O	O	O	
<i>Smilax nipponica</i> Miq. 선밀나물 P120654	O	O		
<i>Smilax riparia</i> var. <i>ussuriensis</i> (Regel) H.Hara & T.Koyama 밀나물 P121714	O	O	O	
<i>Smilax sieboldii</i> Miq. 청가시덩굴	O			
<i>Smilax sieboldii</i> f. <i>intermis</i> (Nakai) H.Hara 민청가시덩굴 P124196		O		
<i>Tofieldia nuda</i> Maxim. 꽃장포	O			
<i>Trillium kamschaticum</i> Pall. ex Pursh 연영초	O			
<i>Trillium tschonoskii</i> Maxim. 큰연영초 P121623	O	O		
Dioscoreaceae 마과				
<i>Dioscorea batatas</i> Decne. 마 P122170	O	O		O
Iridaceae 붓꽃과				
<i>Iris lactea</i> var. <i>chinensis</i> (Fisch.) Koidz. 타래붓꽃	O			
<i>Iris sanguinea</i> Donn ex Horn 붓꽃	O			
<i>Tritonia crocosmaeflora</i> Lemoine 몬트부레치아 P123048	O	O		
Juncaceae 골풀과				
<i>Juncus effusus</i> var. <i>decipiens</i> Buchenau 골풀	O			
<i>Luzula capitata</i> (Miq.) Miq. 평의밥 P120173	O	O		
Commelinaceae 닭의장풀과				
<i>Commelina communis</i> L. 닭의장풀 P0024	O	O		O
<i>Pollia japonica</i> Thunb. 나도생강	O			
Gramineae 벼과				
<i>Aegilops cylindrica</i> Host. 염소풀 KNKA200407151101	O	O		
<i>Agropyron ciliare</i> (Trin.) Franch. 속털개밀 P120861	O	O	O	
<i>Agropyron gmelini</i> (Griseb.) Scribn. & Sm. 털개밀	O			
<i>Agropyron repens</i> (L.) P.Beauv. 구주개밀 P121701	O	O		
<i>Agropyron repens</i> f. <i>aristatum</i> Holmb. 까락구주개밀 P121415		O		
<i>Agropyron tsukushiense</i> var. <i>transiens</i> (Hack.) Ohwi 개밀 P121079	O	O	O	
<i>Agrostis clavata</i> Trin. 산겨이삭 P121399		O		
<i>Agrostis clavata</i> var. <i>nukabo</i> Ohwi 겨이삭 P120228	O	O		
<i>Alopecurus aequalis</i> var. <i>amurensis</i> (Kom.) Ohwi 독새풀 P120305	O	O		
<i>Andropogon brevifolius</i> Sw. 쇠풀	O			
<i>Arthraxon hispidus</i> (Thunb.) Makino 조개풀	O			
<i>Arundinella hirta</i> (Thunb.) Koidz. 새	O			
<i>Arundinella hirta</i> var. <i>ciliata</i> Koidz. 털새 P122324	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Avena fatua</i> L. 메귀리 P120250	O	O		
<i>Avena sativa</i> L. 귀리 KNK4200407151079		O		
<i>Bromus japonicus</i> Thunb. 참새귀리 P120238	O	O	O	O
<i>Bromus mollis</i> L. 털참새귀리 P120914		O		
<i>Bromus pauciflorus</i> (Thunb.) Hack. 꼬리새 P121649	O	O		
<i>Bromus rigidus</i> Roth 긴까락땃새귀리 P120155	O	O		
<i>Bromus secalinus</i> L. 큰참새귀리 P121043	O	O		
<i>Bromus sterilis</i> L. 까락땃새귀리 P121026		O		
<i>Bromus tectorum</i> L. 털땃새귀리 P120316	O	O	O	
<i>Bromus tectorum</i> var. <i>glabratus</i> Spenner 민둥땃새귀리 P121939	O	O		
<i>Bromus unioloides</i> H.B.K. 큰이삭풀 P121417	O	O		O
<i>Calamagrostis arundinacea</i> (L.) Roth 실새풀 P0204	O	O		
<i>Calamagrostis epigeios</i> (L.) Roth 산조풀	O			
<i>Chloris virgata</i> Sw. 나도바랭이	O			
<i>Cleistogenes hackelii</i> (Honda) Honda 대새풀 P123431	O	O		
<i>Cymbopogon tortilis</i> var. <i>goeringii</i> (Steud.) Hand.-Mazz. 개솔새	O			
<i>Cynodon dactylon</i> (L.) Pers. 우산잔디	O			
<i>Dactylis glomerata</i> L. 오리새 P120296	O	O		O
<i>Digitaria ciliaris</i> (Retz.) Koel. 바랭이 P0003	O	O	O	O
<i>Digitaria radicata</i> (C.Presl) Miq. 좀바랭이	O			
<i>Digitaria violascens</i> Link. 민바랭이 P0002	O	O		
<i>Echinochloa crusgalli</i> (L.) P.Beauv. 돌피 P0030	O	O		
<i>Echinochloa crusgalli</i> var. <i>praticola</i> Ohwi 좀돌피 P121992	O	O		O
<i>Echinochloa oryzoides</i> (Ard.) Fritsch 논피	O			
<i>Eleusine indica</i> (L.) Gaertn. 왕바랭이 P0037	O	O		O
<i>Elymus dahuricus</i> Turcz. ex Griseb. 갯보리 P121791	O	O		
<i>Elymus mollis</i> Trin. 갯그렁	O			
<i>Eragrostis curvula</i> Nees 능수참새그렁 P121918	O	O		
<i>Eragrostis ferruginea</i> (Thunb.) P.Beauv. 그렁 P122773	O	O		
<i>Eragrostis multicaulis</i> Steud. 비노리 P0058	O	O		
<i>Festuca arundinacea</i> Schreb. 큰김의털 P120301	O	O	O	
<i>Festuca myuros</i> L. 들복새 P121170	O	O		
<i>Festuca ovina</i> L. 김의털 P120165	O	O		
<i>Festuca ovina</i> var. <i>duriuscula</i> (L.) W.D.J.Koch 서울김의털	O			
<i>Festuca parvigluma</i> Steud. 김의털아재비 P120175	O	O		
<i>Festuca rubra</i> L. 왕김의털 P121468	O	O	O	
<i>Glyceria acutiflora</i> Torr. 육절보리풀	O			
<i>Hierochloa odorata</i> (L.) P.Beauv. 향모	O			
<i>Hordeum vulgare</i> var. <i>hexastichon</i> (L.) Asch. 보리 P120932	O	O		
<i>Imperata cylindrica</i> var. <i>koenigii</i> (Retz.) Pilg. 락 P120803	O	O		
<i>Ischaemum antheophoroides</i> (Steud.) Miq. 갯쇠보리 KHB1258046		O		
<i>Koeleria cristata</i> Pers. 도랭이피	O			
<i>Leersia japonica</i> Makino 나도겨풀	O			
<i>Leersia oryzoides</i> var. <i>japonica</i> Hack. 겨풀	O			
<i>Lolium multiflorum</i> Lamarck 쥐보리 P120421	O	O		
<i>Lolium perenne</i> L. 호밀풀 P121696	O	O	O	
<i>Melica onoei</i> Franch. & Sav. 쌀새 P125691	O	O		
<i>Microstegium japonicum</i> (Miq.) Koidz. 민바랭이새 P123435	O	O		
<i>Microstegium vimineum</i> (Trin.) A.Camus 나도바랭이새 KHB1261636	O	O		O
<i>Microstegium vimineum</i> var. <i>imberbe</i> (Nees ex Steud.) Honda 큰듬성이삭새 P0031	O	O		
<i>Miscanthus sacchariflorus</i> (Maxim.) Benth. 물억새	O			
<i>Miscanthus sacchariflorus</i> f. <i>latifolius</i> Adati 넓은잎물억새	O			
<i>Miscanthus sinensis</i> Anderss. 참억새 P122728	O	O	O	O
<i>Miscanthus sinensis</i> f. <i>gracillimus</i> (Hitchc.) Ohwi 가는잎억새	O			
<i>Miscanthus sinensis</i> var. <i>purpurascens</i> (Andersson) Rendle 억새 P123188	O	O		O
<i>Muhlenbergia japonica</i> Steud. 쥐꼬리새	O			
<i>Oplismenus undulatifolius</i> (Ard.) P.Beauv. 주름조개풀 P121569	O	O		O
<i>Oplismenus undulatifolius</i> var. <i>elongatus</i> Honda 참주름조개풀	O			
<i>Oplismenus undulatifolius</i> var. <i>japonicus</i> (Steud.) Koidz. 민주름조개풀 P124083	O	O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Oryza sativa</i> L. 벼	O			
<i>Panicum bisulcatum</i> Thunb. 개기장 P0013	O	O		
<i>Paspalum thunbergii</i> Kunth ex Steud. 참새피 P121907	O	O		O
<i>Pennisetum alopecuroides</i> (L.) Spreng. 수크령 P122723	O	O		
<i>Phalaris arundinacea</i> L. 갈풀 KHB1268588		O		
<i>Phleum pratense</i> L. 큰조아재비 P121983		O		
<i>Phragmites communis</i> Trin. 갈대 P123131	O	O	O	
<i>Phragmites japonica</i> Steud. 달뿌리풀 P0059	O	O	O	
<i>Phyllostachys nigra</i> var. <i>henonis</i> (Bean) Stapf ex Rendle 숨대	O			
<i>Poa acroleuca</i> Steud. 실포아풀 P120712	O	O		
<i>Poa annua</i> L. 새포아풀 P0036	O	O		
<i>Poa nipponica</i> Koidz. 큰꾸러미풀 P120193		O		
<i>Poa pratensis</i> L. 왕포아풀 P120637	O	O		
<i>Poa sphondylodes</i> Trin. 포아풀	O			
<i>Poa takeshimana</i> Honda 섬포아풀 P121567	O	O	O	O
<i>Poa ullungdoensis</i> I.C.Chung 울릉포아풀	O	O		
<i>Polypogon fugax</i> Nees ex Steud. 쇠돌피 P121236	O	O		
<i>Polypogon monspeliensis</i> (L.) Desf. 갯쇠돌피	O			
<i>Pseudosasa japonica</i> (Siebold & Zucc. ex Steud.) Makino 이대 P120097	O	O	O	O
<i>Puccinellia nipponica</i> Ohwi 갯꾸러미풀 P121453		O		
<i>Sacciolepis indica</i> var. <i>oryztorum</i> (Makino) Ohwi 물뚝새	O			
<i>Sasa borealis</i> (Hack.) Makino 조릿대 P120214	O	O		
<i>Sasa borealis</i> var. <i>gracilis</i> (Nakai) T.B.Lee 섬대	O			
<i>Sasa coreana</i> Nakai 신이대	O			
<i>Sasa kurilensis</i> (Rupr.) Makino & Shibata 섬조릿대 P123225	O	O		
<i>Setaria faberii</i> Herrm. 가을강아지풀 P0029	O	O		O
<i>Setaria glauca</i> (L.) P.Beauv. 금강아지풀 P122218	O	O		O
<i>Setaria italica</i> (L.) P.Beauv. 조	O			
<i>Setaria pallidifusca</i> (Schumacher) Stapf & C.E.Hubb. 가는금강아지풀	O			
<i>Setaria × pycnocomma</i> (Steud.) Henrard ex Nakai 수강아지풀 P122224	O	O		
<i>Setaria viridis</i> (L.) P.Beauv. 강아지풀 P121656	O	O		
<i>Setaria viridis</i> var. <i>pachystachys</i> (Franch. & Sav.) Makino & Nemoto 갯강아지풀 P121792	O	O	O	
<i>Sorghum nitidum</i> (Vahl) Pers. 수수새	O			
<i>Spodiopogon sibiricus</i> Trin. 큰기름새	O			
<i>Themeda triandra</i> var. <i>japonica</i> (Willd.) Makino 솔새 P123453	O	O		
<i>Trisetum bifidum</i> (Thunb.) Ohwi 잠자리피 P122020	O	O		
<i>Zea mays</i> L. 옥수수	O			
<i>Zoysia japonica</i> Steud. 잔디 P120279	O	O		
Araceae 천남성과				
<i>Arisaema amurense</i> Maxim. 등근잎천남성	O			
<i>Arisaema amurense</i> f. <i>serratum</i> (Nakai) Kitagawa 천남성 KHB1253935	O	O		
<i>Arisaema negishii</i> Makino 섬천남성	O			
<i>Arisaema peninsulae</i> Nakai 점박이천남성 P0185	O	O		
<i>Arisaema takesimense</i> Nakai 섬남성 P121666	O	O		
<i>Arisaema thunbergii</i> Blume 무늬천남성	O			
<i>Pinellia ternata</i> (Thunb.) Breitenb. 반하 P120371	O	O		
Lemnaceae 개구리밥과				
<i>Lemna perpusilla</i> Torr. 좁개구리밥	O			
<i>Spirodela polyrrhiza</i> (L.) Sch. 개구리밥	O			
Cyperaceae 사초과				
<i>Carex aphanolepis</i> Franch. & Sav. 골사초 P121680	O	O		
<i>Carex blepharicarpa</i> var. <i>stenocarpa</i> Ohwi 여우꼬리사초 P121572	O	O		
<i>Carex boottiana</i> Hook. & Arn. 밀사초 P121263	O	O	O	O
<i>Carex breviculmis</i> R.Br. 청사초 P120107	O	O		
<i>Carex breviculmis</i> var. <i>fibrillosa</i> Kuk. 갯청사초 KHB1279525	O	O		
<i>Carex humilis</i> var. <i>nana</i> (H.Lév. & Vaniot) Ohwi 가는잎그늘사초 P120138	O	O		
<i>Carex japonica</i> Thunb. 개찌버리사초 P120907	O	O		
<i>Carex lanceolata</i> Boott 그늘사초 P120029	O	O		
<i>Carex longerostrata</i> C.A.Mey. 피사초 KNKA200406172021		O		

Appendix 1. Continued

Scientific name & Korean name	1	2	3	4
<i>Carex matsumurae</i> Franch. 왕밀사초 P121828	0	0		
<i>Carex mitrata</i> var. <i>aristata</i> Ohwi 겨락겨사초 P121297		0		
<i>Carex mollicula</i> Boott 애기흰사초 P121248	0	0		
<i>Carex phacota</i> Spreng. 비늘사초	0			
<i>Carex planiculmis</i> Kom. 그늘흰사초	0			
<i>Carex pumila</i> Thunb. 쯔보리사초 P120293	0	0		
<i>Carex shimidzensis</i> Franch. 산꼬리사초 P121707	0	0		
<i>Cyperus amuricus</i> Maxim. 방동사니	0			
<i>Cyperus difformis</i> L. 알방동사니	0			
<i>Cyperus exaltatus</i> var. <i>iwasakii</i> T.Koyama 왕골	0			
<i>Cyperus glomeratus</i> L. 물방동사니 KHB1265437	0	0		
<i>Cyperus iria</i> L. 참방동사니 P122149	0	0		
<i>Cyperus microiria</i> Steud. 금방동사니 P0012	0	0	0	0
<i>Cyperus nipponicus</i> Franch. & Sav. 푸른방동사니	0			
<i>Cyperus orthostachyus</i> Franch. & Sav. 쇠방동사니	0			
<i>Fimbristylis dichotoma</i> (L.) Vahl 하늘지기	0			
<i>Kyllinga brevifolia</i> Rottb. 파대가리	0			
<i>Scirpus lacustris</i> var. <i>creber</i> (Fern.) T.Koyama 큰고랭이	0			
Orchidaceae 난초과				
<i>Amitostigma gracile</i> (Blume) Schltr. 병아리난초	0			
<i>Calanthe discolor</i> f. <i>sieboldii</i> (Decne.) Ohwi 금새우난초	0			
<i>Cephalanthera erecta</i> (Thunb.) Blume 은난초 P121639	0	0		
<i>Cephalanthera erecta</i> var. <i>subaphylla</i> (Miyabe & Kudô) Ohwi 꼬마은난초 KNK4200407052103	0	0		
<i>Cephalanthera falcata</i> (Thunb.) Blume 금난초	0			
<i>Cephalanthera longibracteata</i> Blume 은대난초 P121360	0	0		
<i>Cymbidium goeringii</i> (Rchb.f.) Rchb.f. 보춘화 P120086	0	0		
<i>Cypripedium macranthon</i> Sw. 복주머니란	0			
<i>Epipactis papillosa</i> Franch. & Sav. 청닭의난초	0			
<i>Epipactis thunbergii</i> A.Gray 닭의난초	0			
<i>Gastrodia elata</i> Blume 천마	0			
<i>Goodyera maximowicziana</i> Makino 섬사철란	0			
<i>Goodyera schlechtendaliana</i> Rchb.f. 사철란 P123369	0	0		
<i>Gymnadenia camtschatica</i> (Cham.) Miyabe & Kudô 주름제비란 P121616	0	0		
<i>Habenaria linearifolia</i> Maxim. 잠자리난초	0			
<i>Liparis krameri</i> Franch. & Sav. 나나별이난초	0			
<i>Liparis kumokiri</i> F.Maek. 옥잠난초	0			
<i>Liparis makinoana</i> Schlech. 나리난초	0			
<i>Oreorchis patens</i> (Lindl.) Lindl. 감자난초	0			
<i>Platanthera freynii</i> Kraenzl. 제비난초	0			
<i>Platanthera mandarinorum</i> var. <i>brachycentron</i> (Franch. & Sav.) Koidz. ex Ohwi 산제비란	0			
<i>Pogonia minor</i> (Makino) Makino 방울새란	0			
<i>Spiranthes sinensis</i> (Pers.) Ames 타래난초	0			
<i>Tulotis asiatica</i> H.Hara 넓은잎잠자리란	0			